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STATE-AIDED INDUSTRIAL VOCATIONAL EDUCATION
IN MASSACHUSETTS

Submitted by

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(B.B.A., Northeastern University, 1936)

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degree of Master of Education

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PREFACE

Vocational education has been accepted as a major field in the educational systems, but the scope of the work and the fields involved are still a controversial issue among educators. With the aid of State and Federal funds, certain fields have been extensively developed in local public school systems.

This paper endeavors to explain the background, laws, policies, organization and administration of Federal aided, State aided, all day, boys industrial vocational schools in Massachusetts. They are cooperative schools of Federal, State and local governments, training in specialized fields under laws and policies of all three bodies.

In the chapters of this paper are included; history of the vocational movement; a condensed version of the Federal vocational or parent laws, policies, administration and organization; a chapter on Massachusetts vocational educational law, policies, organization and administration; and a chapter endeavoring to show how the various laws and policies are coordinated into the operation of approved all day industrial trade schools in Massachusetts.

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This paper endeavors to explain the background, laws, policies, organization and administration of Federal, State, and local vocational schools. It also discusses the various types of vocational schools, their organization, and the various laws and policies which govern them.

In the chapters of this paper are included: history of the vocational movement; a comparison of the Federal vocational or parent laws, policies, organization and administration; a chapter on Massachusetts vocational education; a chapter on Federal vocational education; and a chapter endeavoring to show how the various laws and policies are coordinated into the operation of approved vocational schools in Massachusetts.

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CHAPTER I

HISTORY AND DEVELOPMENT OF THE VOCATIONAL PROGRAM

General Growth of Vocational Education in the United States

Trends in vocational education.- During the last half of the nineteenth century, leaders of commerce, industry and agriculture became concerned about social and economic conditions. Pressure was exerted upon the educational system to change the traditional school curriculum and offer some program of vocational education. The significant feature of this movement was its inception from outside the educational field.

The country was developing rapidly in commerce, industry and agriculture. Leaders began to insist that young people be trained for the nonprofessional vocations, such as skilled trades, clerical and agriculture.

Two distinct trends developed with different psychological theories. The first was practical arts or industrial arts, the other known as vocational education.

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The chief aims in education of the industrial arts type were to develop general skills in doing a variety of things with the hands, and to inculcate an understanding of fundamental processes in agriculture, homemaking, industry and commerce. It was expected that the training in these skills would transfer over into the practical situation of an actual job when the appropriate occasion arose in the life of an individual. The aims of vocational education are based upon the psychological theory that learning must occur in specific or life situations. It does not exclude the proven theory that there is some transfer of learning.

From its very beginning the Federal Government has manifested an interest in education. The general welfare clause 1/of the Constitution has consistently been found broad enough to warrant the use of Federal funds for educational purposes. Federal interest in vocational preparation first took specific form in the Morrill Act of 1862 by which large blocks of public land were allocated to the various states for the support of agriculture and mechanic arts.

Thirty thousand acres were allotted to every state for each of its representatives and senators in the 1/Constitution of the United States, Article 1, Section 8

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United States Congress. Annual financial support in appropriations of money have continued ever since. Thus our State controlled colleges and universities were founded, and are today Federal aided.

Vocational education in secondary schools.- The movement for Federal aid to vocational education at the secondary school level did not develop until the beginning of the present century. Previously there had been some interest in a number of States in the establishment of agricultural and trade schools, but relatively little progress had been made on the basis of private or local public support. During the years between 1900 and 1910 a number of organizations, notably the National Association of Manufacturers, the National Metal Trades Association, certain agricultural organizations, and the National Education Association, began to advocate extended facilities for vocational education in the public schools. The American Federation of Labor, always a strong friend of public education, urged that vocational training be provided under public auspices.

The various individuals and groups interested in this problem met in 1906 and established the National Society for the Promotion of Industrial Education. In 1911 this organization adopted and issued a statement of the provisions it believed should be incorporated in legislation authorizing Federal aid for vocational education. These

proposals were discussed vigorously, and in 1914 the Congress by resolution authorized the appointment of a Commission on National Aid to Vocational Education.

The Commission's report attracted much attention and had considerable influence. For various reasons there was delay, but early in 1917 Congress passed the Smith- Hughes Act ^{1/} providing Federal funds for distribution to the States for vocational education in public schools of less than college grade. The act was approved by President Wilson on February 23, 1917.

Growth of Vocational Education in Massachusetts

Beginning of vocational education in Massachusetts.-

Demands for a change reached a climax in many States during the early years of the twentieth century. Massachusetts was typical of that trend. The Massachusetts Division of Vocational Education says; ^{2/}

"The beginnings of public recognition of the problem lie much further in the past. The General Court of 1870 enacted a law (Chapter 248) requiring the establishment of evening classes in "industrial and mechanical drawing" in towns of ten thousand population. (Fifteen such classes so established in seven cities of the State became in 1908 State aided

^{1/} Smith Hughes Act-Public No.347-64th Congress
S 703-- Signed February 23, 1917

^{2/} State Aided Vocational and Part Time Education in
Massachusetts. Massachusetts Department
of Education P6
Division of Vocational Education 1929
Number 3

vocational classes.) In 1872, legislation was passed (Chapter 86) permitting any town or city to establish vocational classes. Apparently no municipality in Massachusetts stood ready at that time to embark independently on so far-reaching an experiment. Springfield, inaugurating its Evening school of Trade in 1898, has the distinction of being the first and only city to avail itself of the permissive law.

Evidently the time was not ripe, in those decades of the nineteenth century, for the establishment of a general system of vocational education. However, the opinion of educators and industrialists was moving towards it. The law of 1894 (Chapter 471), requiring manual training in every school system representing a population of 20,000 or more, was the answer of the school to a vaguely felt need. Only one year later (Chapter 475, Acts of 1895) the Legislature gave blanket authorization for the establishment of a textile school in any city having 450,000 spindles. In Lowell, Fall River, and New Bedford, such schools were almost immediately established. These are now conducted as State institutions, and consequently, like the Massachusetts Agricultural College (established in 1863) and the Massachusetts Nautical School (dating from 1891), do not form a part of the present State-aided vocational school system."

The Douglas Commission.-- The Magna Charta of vocational education in Massachusetts is the report, in 1906, of the Commission on Industrial and Technical Education, appointed by Governor William L. Douglas in the preceding year by authorization of the General Court ^{1/}. This Commission made an extensive study of both juvenile and adult employment in the industries of the Commonwealth, and succeeded in gaining a prophetically clear concept of what trade education should be. ^{2/}

"The Commission found that the advance in scientific and mechanical production had far outstripped the ability

^{1/} Massachusetts General Court
Acts of 1905-Chapter 4

^{2/} State -Aided Vocational Schools
Op. Cit., P 7

vocational classes. In 1878, legislation was passed (Chapter 86) permitting any town or city to establish vocational classes. Apparently no municipality in Massachusetts stood ready at that time to embark independently on so far-reaching an experiment. Springfield, inaugurating its Evening School of Trade in 1898, has the distinction of being the first and only city to avail itself of the permissive law.

Evidently the time was not ripe, in those decades of the nineteenth century, for the establishment of a general system of vocational education. However, the opinion of educators and industrialists was moving towards it. The law of 1894 (Chapter 471), requiring manual training in every school system representing a population of 80,000 or more, was the answer of the school to a vaguely felt need. Only one year later (Chapter 478, Acts of 1895) the legislature gave blanket authorization for the establishment of a technical school in any city having 40,000 spinners. In Lowell, Fall River, and New Bedford, such schools were almost immediately established. These are now conducted as State institutions, and consequently, like the Massachusetts Agricultural College (established in 1863) and the Massachusetts Maritime School (dating from 1891), do not form a part of the present State-aided vocational school system.

The Douglas Commission. - The Marine Grants of vocational-

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"The Commission found that the advance in scientific and mechanical production had far outstripped the ability

1/ Massachusetts General Court
Acts of 1905-Chapter 4

2/ State-Aided Vocational Schools
Op. Cit., p. 7

of industry to train its workers; that apprenticeship was already a moribund institution; and that the haphazard and uneven preparation of employees in skill and in industrial intelligence was already a serious problem."

The report took a decided stand against the prevalent confusion between technical and vocational education. It says; 1/

"must take the child at fourteen and not wait for him to graduate; it must give him academic work more closely related to the specific industry; and it must not attempt to give him all of the academic work that is at present given in the regular high school, and shop work besides."

The report recognized homemaking as "that vocation in which all other vocations have their root," and deplored the extent to which this field had been overlooked in the educational scheme. It urged the necessity for evening trade extension opportunities for persons already employed; and recommended part-time classes for the group of workers between the ages of fourteen and eighteen years, who without training were likely to remain in non-educative and non-progressive employments.

The report linked agriculture with the "domestic and mechanic arts" in a three-fold recommendation for schools of strictly vocational nature. It foresaw the need for specialized training of teachers for such schools. While suggesting an adjustment of the public school system to the facts of modern economic and industrial life, the report urged 2/

1/ ~~State-Aided Vocational and Part Time Education.~~ Op Cit-P7

2/ " " " " " " " " " " -P8

"that vocational schools be permitted to have their birth and growth in utter independence of existing systems, and entirely outside the influence of their traditions. It advocated State aid as a necessary encouragement towards the establishment by cities and towns of vocational schools whose influence and value would never, in the nature of the case, be restrictedly local."

In the niche which the "Douglas Commission" will always occupy in the history of vocational education, the names of the individuals who composed it should be engraved. Its chairman was Carroll D. Wright, former United States Commissioner of Labor, and President of Clark College, Worcester. Judge Warren A. Reed of Brockton served as vice-chairman; and the secretary was John Golden of Fall River, President of the United Textile Workers of America. The other members were Mrs. Mary Morton Kehew of Boston, President of the Women's Educational and Industrial Union; George H. Marton, Secretary of the Massachusetts Board of Education; Nathaniel I. Bowditch of Framingham, a Trustee of the Massachusetts Agricultural College; John P. Murphy of Lynn, General Organizer of the Boot and Shoe Workers' Union; Simeon B. Chase of Fall River, banker and textile manufacturer. These nine persons thus represented leadership in education, finance, labor, law, agriculture, business, social service and economics. Their far sighted vision fixed the basic principles which have controlled vocational education ever since their day.

The Commission on industrial education.- In accordance with the recommendations of the Douglas Commission, the commission on Industrial Education was authorized by legislative enactment ^{1/} and appointed for a three-year term by Governor Guild. This body was given power to continue the investigations begun by its predecessor; to stimulate by conferences and lectures the rising tide of interest in industrial training; and to initiate and establish vocational schools with the co-operation and consent of local authorities.

The high ability represented by this Commission is apparent from a recital of its personnel. Dr. Paul H. Hamus Professor of Education at Harvard University, headed it as chairman. A. Lincoln Filene of Boston, merchant and economist; Charles H. Winslow of Fitchburg, vice-president of the Massachusetts State Federation of Labor and former member of the Legislature; Carlton D. Richardson of North Brookfield, member of the State Board of Agriculture and prominent official of the Massachusetts Grange; and Mrs. Mary Morton Kehew, who had been a member of the Douglas Commission, made up its original membership. Upon Mrs. Kehew's resignation, owing to ill health, Milton P. Higgins of Worcester, President of the Norton Company and other manufacturing enterprises, was appointed her successor. Later Miss

Emily G. Balch, Professor of Economics and Sociology at Wellesley College, was added to the group. The Commission employed as its executive secretary Charles H. Morse, Superintendent of the Rindge Manual Training School, and consulting engineer.

Consolidation with the Board of Education.- On July 1, 1909, the work of the Commission was taken over by the re-organized Massachusetts Board of Education.^{1/} Dr. David Sneed of Columbia University became Commissioner of Education, and Charles A. Prosser was shortly afterwards appointed deputy commissioner in charge of vocational education. Under these men, with the invaluable assistance of Charles R. Allen as agent, the Massachusetts system of vocational training took on rapidly the definite form and actuating principles which it still carries.

Continuation Schools.- Another seed sown by the report of the Douglas Commission was the suggestion for part-time schools for working boys and girls. In 1913,^{2/} an act was passed permitting cities to establish mandatory continuation schools. Boston had already been operating a voluntary continuation school for employed minors since 1910. In September, 1914, this school opened under the provisions of the

^{1/} Massachusetts General Court, Acts of 1909, Chapter 457

^{2/} "Smith-Hughes Act," Public Law 116, 1913, " 805

^{3/} Massachusetts General Court, Acts of 1917, Chapter 215

new law as the first permissive mandatory continuation school in Massachusetts. In 1919 the Legislature enacted the general continuation school law. This law required every city or town, having 200 or more employed minors between the ages of fourteen and sixteen years to establish such a school. In September, 1920, 49 continuation schools opened their doors.

Teachers-Training.- The insistence, from the inception of the vocational program, upon teachers trained in the trades themselves rather than in technical or normal institutions, had brought to the fore the problem of professional training in teaching. The Legislature of 1914 ^{1/} authorized municipalities to establish classes for the training of vocational teachers, and conferred similar authority on the Commissioner of Education. The latter method of organization prevailed. Teacher-training classes were established wherever and whenever the need for them was felt; and the conduct of the training program became an important function of the Division of Vocational Education.

Smith-Hughes Law.- The Smith-Hughes Act ^{2/} did for the country what the Douglas Commission had done for Massachusetts. Only slight changes were needed in the State ^{3/} ^{1/} Massachusetts General Court-Acts of 1913-Chapter 808 ^{2/} Smith-Hughes Act, Public 673, 74th Congress-HR 12120, June 1936 ^{2/} Massachusetts General court, Acts of 1917, Chapter 215

CHAPTER 11

FEDERAL PARTICIPATION IN VOCATIONAL EDUCATION

Administrative Organization

Cooperation between the Federal Government and the States.- The vocational education acts provide for a plan of cooperation between the Federal Government and the States for the promotion of vocational education in the fields of agriculture, trades and industry, home economics, and commerce.

Under these acts the Federal Government does not propose to undertake the organization and direction of vocational education in the States, but does agree to make from year to year substantial financial contribution to its support. It undertakes to pay over to the States annually certain sums of money and to cooperate in fostering and promoting vocational education and the training of vocational teachers. The grants of Federal money are conditional, and the acceptance of these grants imposes upon the States specific obligations to expend the money paid over to them in accordance with the provisions of the acts.

General objectives of the vocational education acts.- Objectives of the acts are clearly defined in the preamble of the Smith-Hughes Act, "An Act to provide for the pro-

motion of vocational education; to provide for the cooperation with the states in promotion of agriculture, trades and industries; to provide for cooperation with the states in the preparation of vocational teachers and to appropriate money and regulate its expenditure." 1/

The George-Deen Act added the fields of home economics and distributive occupation.

Acts authorizing Federal appropriations to the States and Territories for vocational education.- Appropriations of Federal funds for vocational education are made under the provisions of the following acts:

The Vocational Education Act (Smith-Hughes), to provide for cooperation with the States in the promotion of vocational education. (Approved February 23, 1917.)

An Act extending the benefits of the vocational education and vocational rehabilitation acts to the Territory of Hawaii. (Approved March 10, 1924).

An Act extending the benefits of the vocational education and vocational rehabilitation acts to Puerto Rico. Approved March 3, 1931.)

An Act (George-Deen) to provide for the further development of vocational education in the several States and Territories, authorizing for the year 1937-38 and annually thereafter additional appropriations for vocational educa-

1/ Smith-Hughes Act- Op.Cit., Preamble to

tion in agriculture, trades and industries, home economics and the distributive occupations, and for teacher training, in each of these fields. (Approved June 8, 1936).

Agencies of cooperation:- The agencies of cooperation established by the acts are devised to secure effective cooperation in promoting vocational education.

The Federal Board for Vocational Education was created in 1917 to administer the Smith-Hughes Act-which provided for the use of Federal funds for the promotion of vocational education in cooperation with the States.

The members of this Board consisted of the Secretary of Agriculture, the Secretary of Commerce, the Secretary of Labor, and the U.S. Commissioner of Education, ex officio, and three lay members, who were appointed by the President, by and with the advice and consent of the Senate- one representing agricultural interests, one representing manufacturing and commercial interests, and one representing labor.

Under Executive Order issued June 10, 1933, the functions of the Board were transferred to the Department of the Interior, and on October 10, 1933, the Secretary of the Interior assigned the Board's functions to the U.S. Commissioner of Education. The Board was made an advisory instead of an administrative body and its name was changed to the Federal Advisory Board for Vocational Education. The U.S. Office of Education was transferred from the Department of the

Interior to the Federal Security Agency on July 1, 1939.

The Federal Advisory Board for Vocational Education is the successor of the Federal Board for Vocational Education and is made up of the following members, ex-officio:

Clinton Anderson, Secretary of Agriculture-
Henry Wallace, Secretary of Commerce-
Norman Schwollenback, Secretary of Labor.

The lay members of the Board, who are appointed by the President and who serve without compensation, at present (1946) are;

Robert J. Watt, International Representative, American Federation of Labor, Washington, D.C., member representing labor.

Clarence Poe, Editor, the Progressive Farmer, Raleigh, N.C., member representing agricultural interests.

Paul H. Nystrom, President, Limited Price Variety Stores Association, New York, N.Y., member representing manufacturing and commercial interests, chairman.

The function of the Federal Advisory Board for Vocational Education is to advise the U.S. Commissioner of Education on various phases of vocational education. The Board meets on call in the headquarters of the U.S. Office of Education to discuss with the Commissioner and members of his staff, problems on which the opinions and recommendations of the Board are desired. Many of the recommenda-

tions of the Board on specific phases of vocational education have from time to time been adopted by the Office as a part of its policy in administering the vocational education act.

The services of the Board are particularly valuable in that Board members bring to the U.S. Commissioner of Education and his assistants, the viewpoints and needs with respect to vocational education of groups virtually concerned in the program of vocational education. Through the council and help of members of the Board, the U.S. Office of Education is in better position to formulate and carry out policies which will be in keeping with the needs and desires of these groups.

To provide agencies representing the States, the organic act requires that, as a condition of benefiting under the act, a State board of not less than three members shall be created or designated by legislative act, each State board to work in cooperation with the Office of Education in carrying out within the State the provisions of the act.

The procedure set up contemplates that each State shall submit to the Office of Education a plan outlining the method by which it proposes to conduct its vocational education activities. These plans the Office of Education must carefully examine, and if it finds them to be in conformity with the spirit and purpose of the act, it is authorized to direct that the moneys apportioned to the various States be paid.

In other words, partly by the act itself, partly by the Office of Education and partly by the State board for vocational education in cooperation with the Office of Education, standards of vocational education are established meeting the approbation of both State and Federal Governments.

Methods of Federal administration.- The Office of Education conceives responsibility under the acts as being that of providing services to the States in the fields of vocational education. The several funds set up under the acts out of which Federal money is apportioned to the States, and the appropriations made to the Vocational Division of the Office of Education itself for research and investigation, have indicated the need for and necessitated the development of four administrative services:

1. An agricultural education service
2. A commercial education service
3. A home economics education service
4. A trade and industrial education service

For each of these services there is a chief, who acts under the general direction of the Assistant Commissioner for Vocational Education, and various Federal agents. The Federal agents, in general, act as administrative representatives of the Office of Education in the field, gather information regarding methods adopted by the several State Boards for the administration of the acts, and make reports on State programs in so far as they involve compliance with the requirements of

the law, with the decisions and policies of the Office of Education, and with the approved plans for the States.

Legal Requirements of the Smith-Hughes Act

Outline of legal requirements.- Inasmuch as the relationship between the States and the Office of Education in the administration of the vocational program provided for under Federal grants, is based upon the provisions of the Smith-Hughes Act, 1/ the following outline of the legal requirements imposed by this Act is presented: 2/

Upon the States.- The States shall

- a. Accept, through the legislature, the provisions of the act.
- b. Designate or create, through the legislature, a State board for vocational education consisting of not less than three members having necessary power to cooperate with the Office of Education in the administration of the provisions of the act.
- c. Appoint, through legislature authority, as custodian for appropriations allotted, its State treasurer who shall receive and provide for the proper custody and disbursements of all money paid to the State from Federal Appropriations.
- d. Take advantage of at least the minimum amount appropriated for the training of teachers, supervisors, or directors of agricultural subjects.

1/The Smith-Hughes Act is the organic act, the basic provisions of which govern the administration of the George-Deen Act, except where specific modifications are incorporated of the latter act.

2/ Statement of Policies For The Administration of Vocational Education-U.S. Office of Education 1937-Pages 8 to 12

d. This must be done after June 30, 1920, in order to receive any appropriation for salaries of teachers, supervisors or directors of agricultural subjects.

e. Take advantage of at least the minimum amount appropriated for the training of teachers of trade, home economics and industrial subjects. This must be done after June 30, 1920, in order to receive any appropriation for salaries of teachers of trade, home economics and industrial subjects.

Upon the Office of Education.- The Office of Education shall:

- a. Cooperate with State boards in the administration of the provisions of the act.
- b. Make or cause to have made studies, investigations and reports with particular reference to aiding the States in the establishment of vocational schools and classes and in giving instruction in agriculture, trades and industry, commerce and commercial pursuits, and home economics.
- c. Examine plans submitted by State boards and approve such plans if found to be in conformity with the provisions and purposes of the act.
- d. Annually ascertain whether the several States are using, or are prepared to use, the money received by them in accordance with the provisions of the act.
- e. On or before January 1 of each year, certify to the Secretary of the Treasury each State which has accepted the provisions of the act and complied therewith, together with the amount which each State is entitled to receive under the provisions of the act.
- f. Make an annual report to Congress on or before December 1st on the administration of the act, including therein the reports made by the State boards, and the expenditure of the money allotted to each State.

Upon the Secretary of the Treasury.- The Secretary of the Treasury shall pay quarterly to the custodian for vocational education of each State, upon certification by the Office of Education, the moneys to which it is entitled under the provisions of the act.

Upon the Custodian for Vocational Education-State Treasurer.- The custodian for vocational education-State Treasurer- shall on the requisition of the State board, pay out moneys received as reimbursements for expenditures already incurred to such schools as are approved by said State board and are entitled to receive such moneys under the provisions of the act.

As to the Expenditure of Appropriations.-* Appropriations must-

- a. Be devoted exclusively to the maintenance of teacher training or to the payment of salaries of teachers, supervisors or directors of agricultural subjects, and of teachers of trade, home economics and industrial subjects, having the minimum qualifications set up by the State board with the approval of the Office of Education. *
- b. Be met by equal appropriation from State or local community, or both. For each dollar of Federal money expended for salaries of teachers, supervisors or directors of agricultural subjects, or for the salaries of teachers of trade, home economics and industrial subjects or for the training of teachers of vocational subjects the State or local community, or both, shall expend an equal amount for such salaries or training.
- c. Be so expended that not more than 60 percent nor less than 20 percent of the money appropriated under the act for training of teachers of vocational subjects to any State for any

* The cost of instruction supplementary to the instruction in subjects provided for by the act, necessary to build a well rounded course of training, shall be borne by the State and local communities, and no part of the cost thereof shall be borne out of appropriations made by the act. This does not apply to the maintenance of teacher training.

year shall be used for (1) The preparation of teachers, supervisors, or directors of agricultural subjects. (2) The preparation of teachers, of trade and industrial subjects, (3) the preparation of teachers of home economics subjects.

- d. Be so expended that not more than 20 percent of the money appropriated for the payment of salaries of teachers of trade, home and economic and industrial subjects for any year shall be used for the salaries of teachers of home economics subjects.
- e. Be withheld whenever it shall be determined that such money are not being expended for the purpose and under the conditions of the act.*
- f. Be decreased whenever any portion of the fund annually allotted to any State shall not have been expended for the purpose provided for in the act. This decrease shall be equal to such unexpended portion. (See Question 29 Page 36).
- g. Be replaced to the amount that any portion of the moneys received by the custodian for vocational education of any State under the Act, for any action or contingency, be diminished or lost, and until so replaced no subsequent appropriation for such education shall be paid to the State.
- h. Not be applied, directly or indirectly to the purchase, erection, preservation or repair of any building or buildings or equipment or for the purchase or rental of lands, or for the support of any religious or privately owned or conducted school or college.

Upon the State Boards for Vocational Education.- The State boards for vocational education designated or created as above required shall as a general prerequisite-

* If an allotment is withheld from any State, the State board may appeal to Congress, and if Congress shall not direct such sum to be paid it shall be covered into the Treasury.

- a. Prepare plans showing-
 1. The kinds of vocational education for which it is proposed that the appropriation shall be used.
 2. The kinds of schools and equipment
 3. The type courses of study
 4. The methods of instruction
 5. The qualifications of teachers
- b. Submit such plans to the Office of Education approval
- c. Make an annual report to the Office of Education on or before September 1st of each year on the work done in the State and the receipts and expenditures of money under the provisions of the act.

Teacher salary benefits in the general plan of the

State.- In order to secure the benefits of the fund for salaries of teachers of trade, home economics and industrial subjects, the State boards shall stipulate in the general plan-

- a. That the controlling purpose of the education shall be to fit for useful employment
- b. That education will be given in schools or classes under public supervision or control
- c. That the education shall be of less than college grade
- d. That the education shall be designed to meet the needs of persons over 14 years of age who are preparing for a trade or industrial pursuit or who have entered upon the work of a trade or industrial pursuit.
- e. That the State or local community, or both shall provide the necessary plant and equipment determined upon by the State board, with the approval of the Office of Education, as the minimum requirement in such State for education for any given trade or industrial pursuit.
- f. That the total amount expended for the main-

tenance of such education in any school or class receiving the benefit of such appropriation shall be not less annually than the amount fixed by the State board, with the approval of the Office of Education, as the minimum for such schools or classes in the State.

- g. That schools or classes giving instruction to persons who have not entered upon employment shall require that at least one half of the time of such instruction be given to practical work on a useful or productive basis, such instruction to extend over not less than nine months per year and not less than 30 hours per week.
- i week.
- h. That at least one-third of the sum appropriated to any State for salaries shall be applied to part-time schools or classes for workers over 14 years of age who have entered upon employment, and such subjects in a part-time school or class may mean any subject given to enlarge the civic or vocational intelligence of such workers over 14 and less than 18 years of age.
- i. That part-time schools or classes shall provide for not less than 144 hours of classroom instruction per year.
- j. That evening industrial schools shall fix the age of 16 years as a minimum entrance requirement and shall confine instruction to that which is supplemental to the daily employment.
- k. That the teachers of any trade or industrial subject in any State shall have at least the minimum qualifications for teachers of such subject determined upon for such State by the State board, with the approval of the Office of Education.

Teacher training benefits in the State general plan.— In order to secure the benefits of the fund for the training of teachers, the State boards shall stipulate in the general plan—

- a. That training shall be carried on under the supervision of the State board.

- b. That training will be given only to persons who have had adequate vocational experience or contact in the line of work for which they are preparing themselves as teachers, supervisors, or directors or who are acquiring such experience or contact as a part of their training.
- c. That training will be given in schools or classes under public supervision or control.
- d. That the State board, with the approval of the Office of Education shall establish minimum requirements for such experience or contact for teachers, supervisors, or directors of agricultural subjects and for teachers of trade, industrial and home economics subjects.

Public supervision and control.- The guiding principle of the vocational education acts- it cannot be too strongly emphasized that this principle applies to every phase of activity under the acts- is that the education to be furnished must be under public supervision and control, and designed to train persons for useful employment, whether in agriculture, trades and industry, home economics, or commerce.

Vocational education as defined in the vocational education acts.- To the extent that it is subsidized by the Federal Government under the Vocational Education Acts, vocational education has reference to training for useful employment. It may be given to boys and girls who, having selected a vocation, desire preparation for entering it as trained workers; to youths who, having already

entered employment, seek greater efficiency in that employment; and to adult workers established in their trade, or occupation, who wish through increase in their efficiency and wage-earning capacity to advance to positions of responsibility.

Conditions under which Federal money is made available.- The provision of the Smith-Hughes Act and of the supplementary George-Deen Act are permanent, continuing and similar to one another in most respects. In providing for funds, however, the Smith-Hughes Act actually appropriates Federal funds for vocational education on a permanent basis, while the George-Deen Act merely provides permanent authorization for appropriations for vocational education. After June 30, 1947, all Federal appropriates must be matched dollar for dollar by the state or local governments, or both.

Formula for allotment of Federal money.- Allotments under the Smith-Hughes Act are sent the various State treasurers at the end of each quarter, whereas money under George-Deen Act is sent to the treasurers semi-annually and at the beginning of each period.

Amounts allocated to each state are based upon formula developed from census data, total appropriations and minimum amounts for each state.

The formula for Trades and Industries and Home Eco-

nomics under Smith-Hughes for 1941 is

- A. Total of \$3,111,913.15^{1/}
- B. Minimum of \$10,000 to any state
- C. Balance shall be distributed to the various states on the basis of total urban population to the total urban population of the U.S. and its territories (Maximum Of 20% for home economics)

Under the George-Deen Act, Trades and Industrial Subjects the formula for 1941-51 is

- A. Total of \$4,056,857.50^{2/}
- B. Minimum of \$20,000 to any state
- C. Balance to be allotted on basis of total non farm population in the U.S. and its territories.

Special allotments are available under each for teacher training.

Statement of policies for vocational education.-- Since the inception of the program it has been necessary to supplement the parent laws by interpretations, and devise policies for guidance of the various State departments of vocational education. This work has been compiled into a volume,^{3/} "Statements of Policies for The Administration of Vocational Education". The latest was issued in 1937, following the passage of the George-Deen Act.

1/ Digest of Annual Reports of State Boards for Vocational Education To The U.S. Office of Education, Vocational Division, Federal Security Agency-June 30, 1944-Table 11- Appendix.

2/ Digest of Annual Reports. Op. Cit., Table 12-Statistical Appendix.

3/ Statement of Policies for the Administration of Vocational Schools- Op.Cit .

nomics under Smith-Hughes for 1941 is

A. Total of \$3,111,315.15

B. Minimum of \$10,000 to any state

C. Balance shall be distributed to the various states on the basis of total urban population to the total urban population of the U.S. and its territories (Maximum of 80% for home economics)

Under the George-Deen Act, Trades and Industrial Sub-

jects the formula for 1941-51 is

A. Total of \$4,056,857.50

B. Minimum of \$20,000 to any state

C. Balance to be allotted on basis of total non farm population in the U.S. and its territories.

Special allotments are available under each for teacher

training.

Statement of policies for vocational education. -- Since

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Digest of Annual Reports, Op. Cit., Table 12-Statistical Appendix.

Statement of Policies for the Administration of Vocational Schools-Op.Cit.

Part I is confined to the administrative relationship of George-Deen and Smith-Hughes Funds.

Part II and III are the general and specific statement of policies and interpretations. Pages 13-74.

These are the basic rules around which State programs are developed. A brief summary is presented in order to present a general picture of the organization required by the Federal Board of Education of the various states in the administration of local programs.

Summary of policies for vocational education.- All official dealings must be between the Office of Education and the State board for vocational education, although the right to inspect local schools is reserved. A separate cooperative plan is agreed upon with each state every five years. The Office of Education only determines conditions of reimbursement, and does not assume authority to dictate local policies. Extension of vocational education is looked on with favor under the spirit of the clauses "For the promotion of vocational education" and "For the further promotion of vocational education".

Mandatory provisions of the vocational acts must be carried out. The State may use its own discretion in the establishment of schools and courses, but should take into consideration the various needs of local communities as established through surveys and studies, and the State must

judge all programs proposed by local communities. Standards adopted must be approved by the Office of Education. As the entire program revolves around Federal funds or reimbursement, certain pertinent data are required, such as the schools being legally qualified; that the programs are carried out according to agreement; that the schools are properly supervised and inspected by the State board for vocational education; and that expenditures are properly supervised. The Office of Education and the State board for vocational education become legal agents for their respective governments after the State has accepted the acts, and the State board becomes trustee for all funds. Funds will be paid to the State treasurer, who will honor requisitions of the State board of Vocational education. The State boards must maintain annual audited reports of expenditures to cover the different activities provided for in the Smith-Hughes Act.

Vocational education is to be provided for individuals to the end that they may be effeciently prepared for profitable employment and to instruct those in employment to advance in their respective fields. Admission to classes must be based upon the evidence that the individual possesses the proper qualifications. Vocational education is aided by Federal allotment in the four approved fields only.

Plant and equipment facilities are direct responsibilities of the State board, but the standards are approved by the Office of Education. These are to be furnished entirely by the State and must be publicly owned and controlled, as required by the Acts when -

Properly trained teachers have always been a tremendous problem in vocational education. Trade knowledge, teaching skills and the ever changing needs in the field are all recognized in the teacher-training section. Minimum standards for prospective teachers and teacher trainers, and general expense money for printing, clerical and travel are included.

State supervision is mandatory under a separate administrator for each field. A complete program is necessary, and the State supervisor must have definite qualifications to receive approval of the Office of Education. His work is made more effective by travel allowances incurred for local supervision.

Specific questions have been answered from Pages 25-74. ^{1/}
Those effecting the operation of industrial day trade school follow.

Teachers of vocational subjects should be full time,
1/Statement of Policies. Op, Cit., Pages 25-74

1/Statement of Policies, Op. Cit., Page 29

evening, and part time classes and schools. It may also be but if part time, salaries should be prorated on the number of hours given to each. Reimbursement cannot be allowed when non-vocational students are in the class.

A school or class is under public supervision and control as required by the Acts when - 1/

- a. The school or class is under the supervision and control of a State or local board responsible for the expenditure of public school funds for vocational education in the State or Community.
- b. The school or class is legally a part of the public school program of vocational education as administered by the State or Local board responsible for vocational education.
- c. The teachers are paid from public education funds in the same way followed in the payment of other public school teachers employed by the State or local board responsible for vocational education.
- d. The school or class is administered, controlled, and supervised in all details by officials on the staff of a State or local board responsible for vocational education, including-
 1. Selection, salaries and length of term of teachers.
 2. Qualifications and admission of the pupils.
 3. Content and organization of all courses and curricula.

Federal money may be used for the salaries and travel expenses of teachers, supervisors and directors of approved fields. In trades and industry that applies to all day,

evening, and part time classes and schools. It may also be used for the maintenance and travel expenses incurred in the training of teachers, supervisors and directors of trade and industrial subjects.

Part time schools include trade extension or apprenticeship trade preparatory, and general continuation. They are open to all over 14 and must furnish at least 144 hours instruction per year.

Shop and related instruction can be reimbursed. Non-vocational expenses are required, but must be met by State and local funds. A well rounded course of study including academic subjects necessary for life adjustments in our modern state of society is specified. However, related subjects can include mathematics, science, economics, history, hygiene, civics and similar fields so organized and presented as to be directly related to the occupational needs and interest of the pupils.

Admission to industrial day vocation school should be based upon completion of training. Upon graduation he should be mature enough to be accepted by workers in the occupation. A minimum of 14 is required for all day schools. Interest in learning a trade and ability to do the work should be determining factors.

Classes must be in attendance a minimum of 30 hours per week and not less than nine months per year. Half the

total time must be spent in practical work in periods of not less than 3 consecutive hours, and 25 percent to 35 percent of the total time must be spent in instruction directly related to the trade. Practical work on a productive basis is organized training in the carrying on of operations in accordance with standard practices in the trade or industrial occupation for which the training is given. Trade and industrial subjects include any subject the content of which provides functioning knowledge or skill in any trade or industrial pursuit.

Statistical

Achievements of the Federal vocational program.-

Annual reports of the State departments of vocational education are summarized and published in "Digest of Annual Reports of State Boards For Vocational Education", ^{1/} by the U.S. Office of Education. Several tables are included in the appendix of this thesis that are reprints from the latest report (1945). Tables are included in the text which simplify the detailed tables on enrollment and expenditures. No attempt is made to analyze the data.

Teacher training program.- Qualified teachers have always been a problem in the vocational field, but the situation has been improved by rigid requirements of the Federal

1/Digest of Annual Reports.

Op.Cit., Tables 5, 6 and 8, Appendix

Table 1 Enrollment in Federal Aided Vocational Schools
 Acts. Teacher training is a State function. Standards of entrance into the field, special training and certification are enforced by them. In 1943-44 there were 1631 instructors of teacher training groups, 33,991 prospective teachers enrolled in the classes and 4.6 million dollars were spent on the program.

Teachers in the vocational education system.- The latest data available indicates that in 1944, -46,639 ^{1/} teachers were employed in the vocational program. The war has reduced both enrollment and teaching staff of evening schools, (as much as 80 percent between 1941-44). red States in total enrollment, 38th in agriculture enrollment, 7th in Trades and Industries enrollment, 27th in Home Economics enrollment, and 21st in Destructive Occupation enrollment. It had enrolled in all programs 1.8 percent of the total enrollment.

1/ Digest of Annual Reports-Op.Cit., Table 4 Appendix

1/ Digest of Annual Reports-Op. Cit., Table 1-Appendix

Table.1 Enrollment In Federal Aided Vocational Classes
By Type Of Program-Fiscal Year 1944. ^{1/}

Type Of Program	Total	Agri-culture	Trades & Industries	Home Eco-nomics	Distributive occupations
United States and Territories	2,001,136	469,959	543,153	806,515	181,509
Massachusetts	36,029	1,128	19,985	12,196	2,720

In 1944 Massachusetts ranked 22nd in the United States in total enrollment, 38th in agriculture enrollment, 7th in Trades and Industries enrollment, 27th in Home Economics enrollment, and 21st in Distructive Occupation enrollment. It had enrolled in all programs 1.8 percent of the total enrollment.

Table.3- Expenditure Of Federal, State And Local Funds For Vocational Education, By Type Of Program, In Thousands of Dollars, For Fiscal Year 1943-44. ^{1/}

	Total	Agri-culture	Trades & Industries	Home Economics	Distributive Occupations
Total	59,464	18,449	24,086	18,782	1,107
Federal	17,328	6,620	6,090	4,407	711
State	15,130	4,077	5,142	3,831	308
Local	26,996	7,752	12,854	10,544	988

^{1/} Digest of Annual Reports Op. Cit., Table 3, Appendix.

^{1/} Digest of Annual Reports-Op. Cit., Table 1-Appendix

Table.2 Enrollment In Federally Aided Vocational Classes,
By Type Of Program And By Type Of Class^{1/} Year 1943-44

Type of Program	All Classes	Evening Classes	Part time Classes	All Day Classes	Day-Unit Classes
Total	2,001,136	532,049	521,755	935,515	11,817
Agriculture	469,959	183,880	16,139	259,235	10,705
Trades & Industries	543,153	27,717	345,259	170,177	-----
Home Economics	806,515	233,650	65,650	506,103	1,112
Distributive Occupations	181,509	86,802	94,707	-----	-----

One of the main objectives of the Smith-Hughes Act was to encourage adult progress and part time education, 52.3 percent of the total enrollment was in evening and part time classes, chiefly composed of those two groups.

Table.3- Expenditure Of Federal, State And Local Funds For Vocational Education, By Type Of Program, In Thousands of Dollars, For Fiscal Year 1943-44 ^{1/}

	Total	Agri-culture	Trades & Industries	Home Economics	Distributive Occupations
Total	59,664	18,448	24,056	15,752	1,407
Federal	17,828	6,628	6,080	4,407	713
State	13,138	4,077	5,142	3,591	328
Local	28,696	7,743	12,834	7,754	365

^{1/} Digest of Annual Reports Op. Cit., Table 3, Appendix.

^{1/} Digest of Annual Reports Op. Cit., Table 8, Appendix

Federal funds contribute 29.8 per cent of the total cost, State funds contribute 21.9 per cent of the total cost, and local funds contribute 48.3 per cent of the total cost. One dollar of Federal money is spent for every \$3.36 spent in the program. When teacher training is included the total expenditures exceed 64 millions of dollars. Contributed from Federal sources were 19.9 millions of dollars.

States through financial allotments provided the States comply with their rules and regulations. These State programs are controlled through financial aid. This aid is confined to the fields of industry, agriculture, domestic science, and distributive occupation (commerce).

All education must be public controlled and aided, train for useful employment those over 14 years of age, and training must be below the college level.

Federal money must be matched by State or local money 100 per cent, and can only be used for specified purposes; chiefly salaries of teachers and maintenance of teacher training organizations.

The State Board for Vocational Education is liaison between local schools and the Federal Government, and has all legal responsibilities conferred upon it. Local operation must be State controlled and supervised, and the State must furnish the Federal Government plans for education, statistics and audited expenditures. In some

Summary.— It is evident that the framers of the vocational acts had a definite form of education in mind. Restrictions and definitions are so clear and final that their, and only their type of education may receive financial benefits. The Federal Government does not operate the schools directly, but delegates this power to the various States. The Federal Government will cooperate with the States through financial allotments provided the States comply with their rules and regulations. Thus State programs are controlled through financial aid. This aid is confined to the fields of industry, agriculture, domestic science, and distributive occupation (commerce).

All education must be public controlled and owned, train for useful employment those over 14 years of age, and training must be below the college level.

Federal money must be matched by State or local money 100 per cent, and can only be used for specified purposes; chiefly salaries of teachers and maintenance of teacher training organizations.

The State Board for Vocational Education is liason between local schools and the Federal Government, and has all legal responsibilities conferred upon it. Local operation must be State controlled and supervised, and the State must furnish the Federal Government plans for education, statistics and audited expenditures. In some

Referral funds... the total
cost, state funds... the total
cost, and local funds... the total
to be paid. The dollar of Federal money is spent for
every \$1.50 spent in the program. When...
the is... the...
of dollars. Estimated...
millions of dollars.

THE COMMISSION ON
MORALITY

States (Connecticut) the vocational schools are operated and maintained by State authorities.

Specific standards which must be met by State plans are included in the Smith-Hughes and George-Deen Acts, and supplementary rules and policies to be found in "Statement of Policies for the Administration of Vocational Education".

Through the years about every conceivable educational situation has been encountered, and the official interpretations are to be found there. Questions pertaining to equipment, school days, hours per week for practical work, student eligibility, teacher training, related and general subject teachers, supervision, educational plans, qualification of teachers, buildings, setting up State agencies for vocational education, mixed classes, meaning of public control, part time classes and policies pertaining to legal reimbursement are some of the rulings that have been made. It has been a guide for State departments of vocational education.

CHAPTER 111

AUTHORIZATION AND STANDARDS FOR INDUSTRIAL ALL DAY UNIT TRADE SCHOOLS IN MASSACHUSETTS

State Organization and Administration

Vocational education in Massachusetts.- Many and varied are the fields of vocational education. Massachusetts with its concentrated population and varied industries is a fertile field for vocational education. The state aided groups now include agriculture, trade and industrial education for men, trade, industrial and homemaking education for girls, distributive occupation education, art in business and industry education, continuation schools education, and rehabilitation education. Part time and evening schools are included in many programs. This paper is concerned only with all day State-Aided trade schools.

Legal basis for vocational education in Massachusetts.- Vocational education is authorized by Chapter 74, Sections 1 to 37 with amendments of the General Laws of the Commonwealth of Massachusetts. Any section mentioned in the following pages is a reference to Chapter 74.

Cooperation with the Federal vocational education

board.- The State of Massachusetts accepted the Smith-Hughes Act in Section 19; 1/

"The commissions shall co-operate with the federal board for vocational education in the administration of the act of Congress, approved February twenty-third, nineteen hundred and seventeen, relating to vocational education in agriculture, trades and industries, and secure for the commonwealth the benefits thereof".

The Smith-Hughes Act required the formation of a separate board for vocational education in each state. This title and duties were allotted to the state advisory board of education.

Definitions used in vocational laws.- Several important words are defined in Chapter 74, Section 1 of the General Laws:

- A. "Approved", approved by the commissioner as to organization, control, location, equipment, courses of study, qualifications of teachers, methods of instruction, conditions of admission, employment of pupils and expenditures".
- B. "Commissioner" the commissioner of education
- C. "Evening Class", in an industrial school, a class giving instruction for pupils employed during the working day, and which to be called vocational must deal and relate to the day employment.
- D. "Industrial Education", vocational education fitting pupils for trades, crafts and manufacturing pursuits, including occupations of girls and women in workshop.

1/ Massachusetts General Laws, Chapter 74, Section 19

- E. "Vocational Education", education of which primary purpose is to fit pupils for profitable employment.

Powers of the Commissioner of Education.- Delegated responsibilities by law to the commissioner are to-

- A. Investigate and promote distributive occupation, agriculture, household arts and industrial education.
- B. Superintend and initiate the establishment of schools for such education.
- C. Superintend the maintenance for the above schools.
- D. Designate the schools which shall be approved vocational schools, (approved as to organization control, location, equipment, courses of study, qualifications of teachers, methods of instruction, conditions of employment, employment of pupils and expenditures).
- E. Approve or disapprove non residence pupils, and fix tuition for them.
- F. Present annually to the General Court statements for which cities and towns shall receive reimbursements (Chapter 69-Section 2)
- G. Approve or disapprove disbursements.
- H. Act as coordinator agent between the Federal

government and State to see that the State secure the benefits of the Federal acts.

Division of vocational education.- The administrator of public school education within in the jurisdiction of the State law, is the Commissioner of Education. He has organized the State department of education into various departments, allotting to each specific duties. To the division of vocational education he has delegated the administration of State-Aided vocational education. The division is headed by a director and an assistant director. It is subdivided into the following activities-

- A. Supervisory
- B. Teacher training
- C. Occupational information, guidance, survey and placement
- D. Administration
- E. Rehabilitation

The division of vocational education has as its primary duty the enforcement of powers granted the Commissioner of Education for vocational education. Over a period of years it has printed many publications and letters pertaining to policies of administering the various vocational education acts within the State. It maintains supervisory staffs in all of its fields, whose primary objective is to further the progress of vocational education

EDUCATION

overseas and to the fact that the State has
since the beginning of the century been

Division of Vocational Education

of public school education which is the foundation of
the State law, as the foundation of the State, to the
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generally, subject to each specific action, to the
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administration of State-aided vocational education. The
division is headed by a Director and an Assistant Director.
It is subdivided into the following activities:-

1. Supervision
2. Technical Training
3. Occupational and Industrial Training, Agriculture, Forestry
4. Apprenticeship
5. Art Education
6. General Education

The Division of Vocational Education is the responsibility
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through advisory methods with local schools. By bulletins and at the annual summer convention at Fitchburg Teachers College, teachers are informed of the latest developments in their respective fields. Teacher training for the specialized fields in vocational education has been assumed by the division.

Management of Federal funds.- The State treasurer is the custodian of Federal funds allotted to the commonwealth ^{1/} and shall expend these funds without specific appropriation under the order or approval of the commissioner of education and advisory board of education. The Commissioner ^{2/} may use federal funds as supplementary to State aid for-

- A. Salaries of teachers of vocational subjects
- B. " " " giving types of training chosen by him as especially needing stimulus
- C. For courses for preparation of teachers
- D. Enabling school authorities to conduct vocational teacher training classes.

Reimbursement to local communities for the operation of approved vocational schools.- The General Laws of Massachusetts allotes to a local community moneys totaling fifty

1/ Massachusetts General Laws- Chapter 74, Section 20

2/ " " " " " " 22

(50) percent of the operating cost of an approved industrial trade school 3/

"The commonwealth shall annually pay one half the net maintenance sum to towns maintaining approved local or district independent industrial, agricultural, or household arts schools, except agricultural departments in high school".

Summary of State administration.- Empowered to the Commissioner by law and delegated by the Commissioner to the division of vocation are the definite duties already mentioned. Policies, regulations and controls are products of the division of vocational education. The entire program evolves about the word "approved", and as defined in Section 1, an approved school must achieve certain standards in its activities. Minimum standards are defined by the Smith-Hughes Act, but the State has made those general requirements more specific, as will be noted in the next two sections of this chapter. Control of local schools by the State is maintained through the power of approval.

Definition.- This is the working plan for carrying out the aims of the school. A distinctive organization of courses of study, teachers and pupils shall be presented for approval of the commissioner.

3/ Massachusetts General Laws- Chapter 74, Section 9
"Information Relating to the Establishment and Administration of State-Aided Vocational Schools".

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Massachusetts General Laws - Chapter 74, Section 9

Administration Of An Approved Vocational School

Statuary requirements.- Section 1 of the State voca-

tional law specifies that all State-aided vocational schools must have an approved status as to:

A. Organization

B. Control

C. Location

D. Equipment

E. Courses of Study

F. Qualifications of Teachers

G. Methods of Instruction

H. Conditions of Admission

I. Employment of Pupils

J. Expenditures

In this chapter each item will be discussed and all conclusions will be based upon data drawn from Massachusetts Department of Education, Vocational Division. ^{1/}

Organization of Vocational Schools

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^{1/}Massachusetts Department of Education, Division of Vocational Education. "Information Relating to the Establishment and Administration of State-Aided Vocational Schools".

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Massachusetts Department of Education, Division of Voca-
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Department character.- All independent industrial schools are organized by departments. A department is an organization of courses, teachers and pupils designed to give instruction in a trade, craft, manufacturing pursuit and general education, and includes vocational education of a diversified nature. (General Vocational Department)

The following industrial departments are organized in Massachusetts vocational schools:

- | | |
|------------------------|--------------------------|
| A. Airplane Service | N. Masonry |
| B. Automobile Repair | O. Painting & Decorating |
| C. Boat Building | P. Pattern Making |
| D. Cabinet Making | Q. Plumbing |
| E. Carpentry | R. Pottery |
| F. Catering | S. Power |
| G. Drafting | T. Printing |
| H. Electrical | U. Sheet Metal |
| I. Factory Maintenance | V. Shoemaking |
| J. General | W. Textile |
| K. Commercial Art | X. Upholstering |
| L. Jewelry | Y. Welding |
| M. Machine Shop | |

Advisory committees.- The board of control appoints an advisory committee of employers and employees representing the trades, industries occupations and areas of distri-

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Advisory committees. - The board of control appoints an advisory committee of employers and employees representing the trades, industries, occupations and areas of dis-

butions for which the departments are organized, and no member can be a member of the board of control. A membership of three is advised for each department, and the superintendent of schools or director may act in any executive capacity for that committee.

Distinctive management.- There must be a director, who under the executive office of the board of control shall be responsible for the conduct of the school and all instruction given in the school. He shall be provided with adequate clerical assistance. (The board of control is usually the school committee and the executive officer is usually the superintendent of schools).

Admission of pupils.- Vocational schools must accept legally qualified applicants who will profit from the type of training (See Conditions of Admission).

Faculty and the size of classes.- There shall be one instructor for not more than 20 pupils in any shop program. Not more than 30 pupils are permitted in related classes and academic instructors are limited to 36 pupils. No class can be started with less than 12 members, and no class may be overloaded with the anticipation of pupils dropping out.

Departmental organization.- Trade schools should be organized in separate trade or occupational divisions, referred to as departments. These departments have a unit

organization as to shop and related work. The scope, content and order of teaching cannot be co-ordinated with the work of another department in a school. Best results are obtained when each department has its own equipment and students are taught related work by teachers assigned to one department. Certain related or manipulative content, common to some other trade may be organized into a common program, but in so doing there is danger of departing from true trade training organization and taking on the organization of the industrial arts high school.

Attendance requirements.- When less than 75 per cent of the original enrollment in a department or per cent of attendance falls below 75 in a department, evidence shall be demanded to show reason for reimbursement for maintenance of that department or course.

Quantity of service.- Minimum requirements for all day vocational schools are-

- A. They shall remain open for the same number of weeks as the established high school.
- B. The week shall be composed of five days, seven hours per day or a total of 35 hours per week.
- C. The minimum yearly instruction should be 1400 hours.
- D. Eighty per cent shall be for vocational instruction.

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Attendance Requirements. - When less than 15 per cent of the original enrollment in a department or per cent of attendance falls below 75 in a department, evidence shall be furnished to show reason for readjustment for maintenance of that department or course.

Quantity of service. - Minimum requirements for all day vocational schools are:

1. That shall remain open for the same number of weeks as the established high school.
2. The week shall be composed of five days, seven hours per day on a total of 35 hours per week.
3. The minimum yearly instruction should be 1400 hours.
4. Eighty per cent shall be for vocational instruction.

- E. Fifty per cent shall be shop or productive work
- F. Minimum shop period should be one school day, and less than one half day will not be approved
- G. General vocational departments may operate on a 30 hour per week basis

Allotment of pupils time.- The program shall give-

- A. Eighty per cent to 90 per cent of entire time to vocational subjects

- B. Fifty per cent of total time must be allotted to school and productive work (shop)

- C. Thirty per cent to 40 per cent of total time should be given to related technical work

- D. Not more than 20 per cent of the total time may be given for general education, and in that time must be included courses in citizenship and personal hygiene up to 10 per cent of the time

- E. General vocational departments may offer a minimum of 50 per cent productive work, which must be in consecutive periods.

Quality of service.- Individual efficiency is a product of a large amount of individual work. Vocational schools therefore, should be organized to deal effectively with a group of pupils varying widely in capacity, maturity and education, and to secure advancement as rapidly as possible.

- 47
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Special functions.- In all schools there should be a system of making individual inventories, administer vocational counseling, accumulate individual records, administer tests, advise and prescribe special work for individual pupils, and to analyze and organize placement and follow up records for counseling. Some of this work is the function of individual teachers, but chiefly it is an administrative problem of the director.

Placement function.- The connecting link between the school and industry is in this department. They should-

- A. Survey the extent to which the school is meeting the needs of industry
- B. Survey new trades and training opportunities
- C. Placement of pupils (graduates and other pupils ready to enter employment)
- D. Furnish information regarding employment for discharge record for all pupils
- E. Followup graduates after placement
- F. Have records available for life history cards
- G. Conduct occupational surveys for employment opportunities

Control Of Vocational Schools

Definition of control.- By control is meant the responsible local board in whose charge, by an ordinance in cities and by the action of a town meeting in towns, is placed the local administration of vocational education.

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Legal basis for establishment.- General Laws amended, ^{1/} provides that:

"Towns may----- establish and maintain independent distributive, industrial, agricultural and household arts schools--through school committees----- through boards of trustees elected for a period of not more than five years".

Method of control chosen by the local communities.-The city or town determines which method of control to adopt, but the board shall be known as "Local Trustees for Vocational Education".

Operation of the board of control.- A separate organization must be effected, and separate records of meetings kept. An executive officer is designated to whom the State Department of Education shall communicate officially. Where a school committee is the board of control, the superintendent of schools is the executive officer. Where a board of trustees is in control, the director shall be the executive officer. In most instances the board of education or the school committee acts in that capacity.

Location Of Vocational Schools

General conditions to be considered.- By location is meant any pertinent matter relating to the place in which a school is conducted. The industrial school and all its departments should be satisfactorily located as to housing

1/Massachusetts General Laws- Chapter 74, Section 3

condition, land, accessibility, and in or close to an industrial environment.

Equipment Of The Vocational School

Source of equipment.- By equipment is meant machinery and apparatus, apart from educational supplies, employed in carrying on the education. It must be furnished by the local authorities.

Inventory and replacement of equipment.- A complete list of equipment must be kept available for inspection by State supervisors. This is important, for replacement cost on items are eligible for state reimbursement.

Amount of equipment necessary.- The equipment in any department shall be sufficient in quantity and variety to enable that department to give instruction in all of the standard methods used in the occupation for which the school proposes to give instruction, and in sufficient quantity to enable each pupil to keep continuously at work during the shop periods.

Course Of Study In Vocational School

Contents of day school courses of study.- By "courses of study" is meant the succession of study and practice connectedly followed in a given portion of vocational education. They must be in sufficient detail so that they may be analyzed by the state supervisor and should show the proposed;

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training at the State's expense.

- The division of vocational education has assumed the following responsibilities, set the standards for teachers in the various departments, established schools for teachers and has supervised the training of candidates.
- A. Aim
 - B. Scope
 - C. Content
 - D. Order of presentation

Space occupied by the equipment.- The space occupied by any piece of equipment should be sufficient to ensure its safe and proper use. Sufficient space should be furnished for tool rooms and stock rooms conveniently located.

Use of equipment for other than vocational education.- Equipment is owned by local authorities and may be used by them in any manner they desire. Use of equipment by outside agencies cannot be charged as vocational, and must be reported to the State and reduce the State refund.

Qualifications Of Teachers

Definition of teachers and qualifications of a teachers.- A teacher includes all those serving as director, heads of departments and instructors. Qualifications refers to the qualities and attainments that are acceptable as fitting a person to instruct or direct pupils in vocational schools.

Training of teachers for vocational education.- Teachers for State-aided schools may be trained at local schools in conjunction with the State, the community and State sharing expenses; or the State can do the entire

t raining at the State's expense. 1/

The division of vocational education has assumed the teacher-training responsibility, set the standards for teachers in the various departments, established schools for teachers and prospective teachers, selects candidates for the schools and issues certificates of eligibility to the graduates. State approval is required for every teacher in State-aided vocational schools.

Local schools responsibility for teachers.- The local board of control will employ all vocational teachers and fix their salaries, but teachers employed must have State approval. This approval is contingent on the candidates eligibility.

Classification of instructors.- There are three classes of instruction, shop, related and academic. Standards for each classification have been established by the Division of Vocational Education. All applications and applicants are checked previous to their entrance into the established 200 hour teacher training course. Upon satisfactory completion of this course a paper showing eligibility is issued in one of the three above groups. To retain this eligibility professional improvement is required annually of 1/Massachusetts General Laws, Chapter 74, Section 18

all teachers.

Day industrial qualifications for teachers.- Shop teachers must be 40 years of age at the time of their first employment, be a high school graduate or equivalent and have eight years experience, or their equivalent at the trade or occupation in which he is to teach. (A four year minimum journeyman's experience is required). Related instructors as a rule are shop instructors, but lower trade requirements and higher technical education is acceptable. Academic teachers must be college graduates with one year of teaching experience.

List of available teachers.- The division of vocational education, teacher training division, keeps an active list of teachers eligible for full or part time employment in the various fields. This system provides the vocational field with a teacher pool, and the teacher training division with valuable data needed for educating new teacher candidates.

Methods Of Instruction and Inspection. The

Project method of instruction.- The instructor's regular way or manner of carrying out the work of the school with the pupil is the method of instruction. Whenever a pupil discharges a responsibility, he has completed a project or a job. The project method in vocational education is a plan of instruction combining growth in manipulative

skill on a shop job, with growth in power to apply the related technical knowledge on the job. The project or job method is advocated for trade schools in preference to the organized instruction on independent subjects, arranged in logical progression chiefly to impart knowledge.

Aim of shopwork.- The objectives of shop work are;

- A. To develop skills in the pupil to turn out first class work under conditions of speed.
- B. To train for work under conditions comparable with those under which he will work after leaving school.
- C. To learn the work from operation sheets, blueprints or instructions which the pupil has not prepared himself, and to work by other than standard methods.

List of projects.- A series of projects calculated to give the desired instruction is necessary. Each project card should be analyzed as to operation and inspection. The project card is necessary to place responsibility for the assignment, to furnish a record of the work done, and to place a definite responsibility upon the instructor for accepting such work as may be asked for.

Production shop organization.- Vocational schools should conduct a production shop which conforms in all de-

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Production shop organization. - Vocational schools

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sirable factors with industrial standards, and each school must keep an accurate record of its productivity. The work upon which the pupils are trained shall be planned and perfected with reference to commercial value, and the products shall be judged by commercial standards.

The general atmosphere, system, standards, and administration of the school shall be that of a good industrial shop. Each school must adopt some approved office and shop system covering these provisions;

A. No work shall be carried on in any shop except by an order from the office of the school, and a record should be kept of the assigned work.

B. Completed jobs.

C. Jobs in process. Definite responsibility shall be placed on someone for the completion of the work.

D. Definite methods of assigning work to pupils and securing data.

Conditions of Admission

Pupils from the local community.- The school shall be open to all residents of the community who are over fourteen years of age. Admission to the school must be based upon the applicant's desire to pursue the chosen occupation and his ability to profit by the instruction.

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Related classes should be organized in separate, homogeneous vocational groups. High school students are not eligible for admission to vocational shop classes as part of their general education. Special plans may be approved for small vocational departments organized in connection with the high school.

Non-resident pupils.- State-aided vocational schools by law ^{1/} must consider applications from pupils outside of the local community. Applications are received by the local schools, and must be referred to the Commissioner of Education. He is the final authority of approval or disapproval. The cities or towns must pay the local community tuition fees set by the Commissioner. They in turn receive reimbursement from the State.

Employment Of Pupils

Employment within the school.- By employment of pupils is meant that which occupies the time or attention of the pupils while attending vocational school. Within the school it must be of a character which promises efficient vocational instruction. An approved type of card must be kept to record the pupil's time and accomplishments.

Pupil's individual records.- Certain records shall be required for reference in the matters involved in the employment of pupil's time. They will constitute a specific statement as to the individual pupil in terms of kind of ex-
1/Massachusetts General Law, Chapter 74, Section 7

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Massachusetts General Law, Chapter 74, Section 7

perience, time factor and the balance of training with accomplishment. Two types of records are required;

- A. Historical and statistical
- B. Trade and occupational

Expenditures

Reasons for the records.- Expenditures are all pertinent facts relating to the disbursements or receipts of a vocational school. By law the commonwealth will pay one-half (50 per cent) of the net maintenance cost of operating a vocational school. 1/

"Net Maintenance sum shall consist of the total sum raised by local taxation and expended for the maintenance of a school, less the amount, for the same period, of tuition claims, paid or unpaid, and receipts from the work of pupils or the sale of products". 2/

In order to arrive at the complete figures necessary to the auditing of accounts, complete records must be kept to determine actual amounts to be paid by the State and the local communities.

Maintenance of schools.- New buildings, expansion of old buildings and adequate equipment must be furnished by local authorities without aid.

The total sum raised by taxation for operation of the 1/Massachusetts General Law, Chapter 74, Section 9

2/ Information Relating To The Establishment and Administration Of State-Aided Vocational Schools. Op.Cit.,Page 42

school includes salaries, light, heat, supplies, repairs, replacement items and all other miscellaneous costs necessary to operate a school. Any receipts are not included in that sum. Receipts are money or credit for outside tuition, any productive work, and credit for materials used in permanent school improvements, and are subtracted from the total sum raised by taxation to arrive at the net maintenance cost.

Tuition Fees for Non-Resident Pupils

Fixing the fee.- The Commissioner of Education from financial reports shall determine and set the charges for non-resident pupils.

Productivity Records

Reason for records.- A complete record of the productivity of each department and the school is necessary to check the degree to which the school is carrying on productive labor; to determine the character of the schools labor or product; to display the items which reduce the gross maintenance cost of the school.

Type of records.- Productivity records should show service (labor), receipts, materials furnished by school or customer, and no returns, and all records must be kept on uniform account sheets furnished by the State.

Procedure for securing reimbursement.- A State-

ment of the amounts due a city shall be executed by the director and certified by the supervisor of administration of the State department, and shall cover the periods ending August 31 of the year involved.

Establishing The Vocational School

General Requirements.— On the Commissioner of Education rests the direct responsibility of promoting the establishment of vocational schools. By Massachusetts law, vocational education is defined as "that type of education, the primary purpose of which is to train for useful employment". From that definition certain conclusions may be drawn concerning vocational education. Among these necessary factors are:

- A. That places for employment of the graduates be open in the specialized fields for which training is to be given.
- B. That standards used in training be similar to those found in the field.
- C. That conditions of training follow closely those to be found in the field.
- D. That proper equipment be available and in the quantity needed.
- E. That the instructors be specialists (trained in a special field).
- F. That the legal requirements of the law be followed.

CHAPTER IV

ESTABLISHING AND ADMINISTERING AN ALL DAY INDUSTRIAL VOCATIONAL SCHOOL IN MASSACHUSETTS

Establishing The Vocational School

General Requirements.— On the Commissioner of Education rests the direct responsibility of promoting the establishment of vocational schools. By Massachusetts law, vocational education is defined as "that type of education, the primary purpose of which is to train for useful employment". ^{1/} From that definition certain conclusions may be drawn concerning vocational education. Among these necessary factors are;

- A. That places for employment of the graduates be open in the specialized fields for which training is to be given.
- B. That standards used in training be similar to those found in the field.
- C. That conditions of training follow as closely those to be found in the field.
- D. That proper equipment be available and in the quantity needed,
- E. That the instructors be specialists (trained in a special field)
- F. That the legal requirements of the law be followed.

G. That the pupils possess proper aptitudes, interests, and attitudes to profit fully by the training.

Specific requirements.- In order to facilitate the establishment of such a school, the Commissioner may give tentative approval after the legal requirements have been met, and then require all of the following before giving formal approval to the school.

- A. Copy of the city ordinance, or vote of the town authorization
- B. Appointment of the board of control and executive officer
- C. Appointment of an advisory committee
- D. Appointment of an approved director
- E. Establishment of approved location
- F. Adequate equipment
- G. An approved organization of courses
- H. Approved teachers
- I. Approved organization of pupils, plans for admission of pupils and employment of time,

the program of school and departments.

Formal approval by the Commissioner is necessary before local communities are eligible to the financial benefits under the State vocational educational law.

City ordinance or town authorization.- The local

G. That the pupils possess proper attitudes,

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Formal approval by the Commissioner is necessary be-

fore local communities are eligible to the financial

benefits under the State vocational educational law.

City ordinance or town authorization. - The local

government, such as the Board of Aldermen or the Municipal Council, must pass a law authorizing the local school committee to establish and maintain State-aided vocational education in accordance with the provisions of Chapter 74, General Laws and Amendments. Upon the receipt of this ordinance, the Commissioner has an official request for participation in the vocational education program. His qualifications are determined by the local group.

Appointment of a board of control.- This board must be publicly controlled. The function is usually taken over by the local boards of education or the school committees, with the superintendent of schools acting as the executive officer. The board has similar jurisdiction over vocational education that it holds over general education, except as limited under Chapter 74, General Laws. A separate organization from the one governing general education must be made, and separate records maintained. All official communications from the State Department of Education will be with, or through, the local executive officer.

Appointment of an advisory committee.- A committee composed of members representing local trades, industries, occupation and areas of distribution must be appointed by the board of control, but no member of the board of control may be a member. Committees may be organized for separate departments, in which case three members are re-

government, such as the Board of Aldermen or the Municipal Council, must pass a law authorizing the local school committee to establish and maintain State-aided vocational education in accordance with the provisions of Chapter V, General Laws and Amendments. Upon the receipt of this ordinance, the Commissioner has an official request for participation in the vocational education program.

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Appointment of an advisory committee. - A committee

composed of members representing local trades, industries, occupation and areas of distribution must be appointed by the board of control, but no member of the board of control may be a member. Committees may be organized for separate departments, in which case three members are re-

commended. They must, in both cases be composed of employers and employees. Their function is entirely advisory, but their influence might be extensive and useful.

Appointment of a director.- This important official is appointed by the board of control, or trustees for vocational education. He is distinctly responsible for the conduct of the school, and all instruction given in it. His qualifications are determined by the local group although his appointment must be approved by the Commissioner.

Choice of an approved location.- The location fixed upon by local authorities is checked by the State inspectors from the division of vocational education. The term "choice" includes all pertinent matters relating to the place in which a school is to be conducted, and includes housing conditions, land, accessibility, and the proper environment.

Approval of the equipment.- The equipment shall be sufficient in variety to enable the departments to give instruction in all standard methods in the occupations for which the school proposes to give training. There should be sufficient equipment to enable each pupil to keep continuously at work. By equipment is meant machinery and apparatus, not educational supplies.

A complete inventory of the original equipment must be made. A copy is furnished to the State department, and an annual inventory made thereafter. The local city or town must pay for the original equipment. Replacement and maintenance costs are reimbursable, so such complete records are important.

An approved organization of courses.- The school must be organized by departments, and the aim, scope, content, and order of presentation of courses must be approved. This method of organization will be analyzed in detail in the next section.

Approval of the teachers.- The local schools may employ any individual to teach in the vocational school, but such employees must be passed upon by the Commissioner who will approve only qualified candidates in the special fields. A candidate becomes qualified after he has proved his qualifications to the Commissioner, and has completed the regular 200 hours teacher-training course.

Approval of the school organization.- Plans for the admission and organization of pupils, the employment of their time, the entire program of the school, with a calendar and key, must be approved.

Summary.- The matter of approval is elastic, for no school can be completely organized previous to its opening. Details and problems must be solved as they

arise. Organization as to time, pupils and schedules, will differ with various towns and cities, since no two systems are exactly the same. Departmental courses of studies are much more effective if they are products of the instructors and fit the equipment and other problems involved. Thus tentative formal approval may be given with justification for several years until such time as all approval factors can be developed in an effective harmonious manner.

In this chapter are included many references to an approved school which is typical of similar vocational school organizations in the Commonwealth of Massachusetts. In the appendix will be found forms used in that school, along with other blanks and forms required by the Division of Vocational Education, Massachusetts Department of Education.

Administration Of A Vocational School
Legal responsibilities of the Commissioner of Education.— Upon the Commissioner rests the power of approval for the operation of vocational schools in Massachusetts. By law, the factors used in giving approval to a vocational school are; 1/

- A. Organization of the school and all instruction
- B. Control
- C. Location
- D. Equipment

1/ Massachusetts General Law-Chapter 74, Section 1.

E. Courses of study

F. Qualifications of teachers

G. Methods of instruction

H. Conditions of admission

I. Employment of pupils

J. Expenditures

The policies and regulations for each factor are contained in a bulletin of the division of vocational education; "Information Relating To The Establishment And Administration Of State-Aided Vocational Schools". ^{2/} Departing from the setup in that bulletin, I am endeavoring to cover the practical operations of trade schools that have been approved.

Executive officials of a vocational school.- The board of trustees is usually the board of education or school board. The executive officer is the superintendent of schools, and all official business with the State Department must pass through him. The board of trustees choose a director in the same manner as it would the principal of any school under its jurisdiction. The director, under the executive officer, is distinctly responsible for the conduct of the school and all instruction given in it. He must be provided with adequate clerical assistance.

^{2/}Information Relating To The Establishment and Administration of State-Aided Vocational Schools. Op.Cit.

2. Courses of study
3. Qualifications of teachers
4. Methods of instruction
5. Conditions of admission
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²Information Relating To The Establishment And Administration Of State-Aided Vocational Schools. Op. Cit.

Departments of the vocational schools.- Vocational

schools are organized by departments. A department is a specialized field of the industrial system, such as automobile, repair, plumbing or machinist. The physical layout equipment, and subject matter of a department is designed to develop most effectively a skilled tradesman in the specialized field for which the department is organized. The objective is to train for profitable employment in fields for which there are available jobs. Profitable employment is a broad term which indicates progress in the trade, and general education to supplement the specialized information given in the departments. For these reasons academic studies are required in all schools to complement the specialized training.

The division of vocational education has approved the following departments for boys in Massachusetts;

- | | |
|----------------------|--------------------------|
| A. Airplane Service | J. Factory Maintenance |
| B. Automobile Repair | K. General |
| C. Boat Building | L. Interior Decoration |
| D. Cabinet Making | M. Jewelry Making |
| E. Carpentry | N. Machine Shop |
| F. Catering | O. Masonry |
| G. Drafting | P. Painting & Decorating |
| H. Dressmaking | Q. Pattern Making |

R. Plumbing

AA. Welding

S. Pottery

BB. Electrical-Sub

T. Power over 14 years of age, divided into

U. Power, Stitching, wiring, telephone,

V. Printing, motors, radio,

W. Radio, Generators.

X. Sheet Metal

Y. Upholstery, after the completion of a regular

Z. Shoemaking

The general department is a combination of many departments. It is effective in small communities where there is an insufficient demand for the establishment of a specialized department. Medford ^{1/} operates a large general vocational department that is often referred to as "Pre-Vocational".

Students are assigned, who do not reach the regular department standard of the vocational school, such as slow students, over age students, students not interested in the regular public school programs, and students who do not possess the intelligence or aptitudes necessary for the general school program. They are given general training and then placed in employment or advanced to the regular vocational program if their work shows progress and

1/ Appendix-Page i

ability.

Qualifications of the students.- Any resident of the community who is over 14 years of age, and whose aims and desires are to pursue the occupation trained for, is eligible for vocational training. In actual practice students under 14 years of age are allowed to enter. In Massachusetts the large majority of student body enter vocational schools in September, after the completion of a regular school year in the elementary or junior high schools. A boy 14 years 9 months of age in September entering a four-year course would be 19 years 6 months at graduation. The graduate of a junior high school (6-2-4-system) who is nearly 14 years of age would not be refused in a four year school, for he would be over 18 years of age at graduation. Each case is individual, and common sense must regulate the decision. One school insists on junior high school graduation (9 years) as a requirement, and some graduates will be under 14 years of age. Excellent candidates would be lost if they were not permitted to enter at the break between junior and senior high schools. In three years vocational schools, having that requirement age is rarely a problem, for entrants are usually over 14 years of age upon completion of the ninth grade.

Application for admission by local students.- A student may enter a local school at any time in the school

year upon presenting a signed application blank and getting approval of the school authorities and his parents. Actually most students are members of the public school system, under 16 years of age, and subject to the compulsory attendance laws. Most of the vocational students therefore, are transfers from the regular public schools. That transfer usually occurs at the end of the school year, usually in June, with entrance into the vocational school in September. Samples of application blanks are shown. ^{1/} These contain vital information and must be signed by the parent. The application blank shown was developed to reduce the number of forms to be signed by parents, and to make certain all necessary forms and permits were obtained from all pupils. Particular attention should be given to the machine permit.

Application for admission by non-resident pupils.-

Pupils may be accepted from other cities or towns. Non-resident pupils may apply at a local vocational school and fill out the regular State form. ^{2/} One blank is forwarded to the applicants superintendent of schools for his information and comment, and returned, to the local vocational school. The entire blank (of three copies) is forwarded to the Commissioner of Education. The Commissioner is the

1/ Appendix- Pages a and b

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final authority on the application. If he approves, the applicants town or city must pay tuition to the local vocational school. The applicants town in turn will receive reimbursement from the State.

Methods used in the selection of students.- This process is a direct responsibility of the director. To get the most effective school he must select for each department pupils with the proper interests, aptitudes, abilities, physique and background. The application blank and personal interview will take care of the interest and background of the students, but other indicies, more difficult to collect and analyze should be available.

Most of our general educational systems have developed a well organized testing system. ^{1/} Some are centralized; others are part of the individual school organization. In any case, this information is, or should be, available to the director, as well as the complete record of subjects, grades and attendance of the applicant. ^{2/} In some cities rating charts ^{3/} are available. These are made out by the teachers or the guidance department of the junior high school.

The director must develop standards of admission for

1/ Appendix- Page c

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The director must develop standards of selection for

✓	Application Form
✓	"
✓	"

each of his departments. With the aid of the various instructors and past records, certain correlations between the records mentioned above and the same records measured in successful graduates can be obtained. These data, will serve as a guide in formulating standards to be used in selecting candidates for the various departments.

Pupils seeking admission from out of town, or transfers from another school system, should present a transcript of his previous school record and test results. If these are not available, the record should be obtained through the regular school channels. The pupil can be sent to the testing department for the regular intelligence, mechanical, reading, or mathematic aptitude tests used in the school. A director should have this data on each pupil, in order to have a true picture of his qualifications, and, any guidance that might be necessary after the applicant becomes a student.

Appointment of instructors.- The faculty is appointed and their salaries fixed by the local board of control. All appointments must be made with the approval of the Commissioner. He, through the division of vocational education, maintains a list of available qualified teachers, and maintains an ample supply of qualified men by operating a specialized teacher training course for instructors in the vocational fields.

The Commissioner does not dictate who the local schools

each of the departments, with the aid of the various instructors and past records, certain comparisons between the records mentioned above and the new records mentioned in the preceding paragraphs can be obtained. These data will serve as a guide in formulating standards to be used in selecting candidates for the various departments.

Results resulting from the use of the new or revised tests from another school system, should present a transcript of his previous school record and test results. If these are not available, the record should be obtained through the regular school channels. The pupil can be sent to the testing department for the regular intelligence, mechanical, reading, or mathematical aptitude tests used in the school. A director should have the data on each pupil in order to have a true picture of his qualifications, and any guidance that might be necessary after the applicant becomes a student.

Appointment of Instructors. - The Faculty is appointed and their salaries fixed by the local board of control. All appointments must be made with the approval of the Commissioner. He, through the division of vocational education, maintains a list of available qualified teachers, and maintains an ample supply of qualified men by operating a specialized teacher training course for instructors in the vocational fields.

The Commissioner does not dictate who the local schools

shall appoint, except insisting that the appointee be a qualified individual.

Qualifications of the instructors.- In general there are two types of instructors, trade or shop teachers and the academic teachers. A departments work is divided into two parts; shop work and related work. From that division has come the tendency to classify teachers as shop teachers or related teachers. The related teacher should have the same qualifications as the shop instructor. That is the present trend in the vocational schools.

Shop teachers must have at least eight years of trade experience. Fifty per cent of the time spent in a technical school may be applied to this experience, but the actual trade experience must exceed four years. They must also be eligible for appointment, which can only be obtained upon completion of the State operated vocational teacher-training course. This is an intensive course in job analysis and techniques of vocational teaching lasting 220 hours. Applicants for this teacher training are carefully screened as to personality, experience, education, speech, appearance and age. A minimum education of the high school level, and a maximum age of 40 have been used in recent years as standards in accepting the first appointment. In certain trades, such as electrical and plumbing, a license is required.

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but the requirements may be reduced with special permission. Each case is individual, but in all cases he must have sufficient knowledge of the occupation to enable him to enter into the aim and purpose of vocational education, and have completed the teacher training requirements. Academic teachers must be college graduates with at least one year of successful teaching experience.

It should be reemphasised that eligibility makes the holder eligible to teach only in the special field in which he has qualified.

Courses of study.- This is the program of successive experience used in a department for the development of interests, skills, abilities, and attitudes, necessary for the desired development and growth of the pupil. These courses have been well paid out in past years for the regular and accepted trades. In the teacher-training course each teacher had to develop a complete course in his special field.

The general method of approaching courses of study for all fields is essentially the same. The field is studied and broad units obtained. Objectives and standards are developed for each unit and a series of productive jobs laid out for the student, starting with simple jobs, and getting progressively more difficult. At the end of those experiences he should have developed the skills and speed set as the standard for that unit.

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Each job is analyzed for teaching points and related knowledge. By related knowledge is meant the mathematics, science, or drawing involved in that job. This knowledge must correlate with the actual job, and it also becomes the basis for the related course of study. Science is a broad term meaning theory, principles, materials, operation of equipment or machines, testing, safety and experiments.

The academic course of study must include history, citizenship, english and hygiene.

In all cases, the organization should be such as to permit individual instruction and progress.

Time allotted to the various activities.- Fifty per cent of the total time must be productive (shop) work. The minimum length of a shop period is three hours. School must be in attendance five days per week, seven hours per day or a 35 hour week. Thus there must be an average of 17.5 hours per week in the shop.

Several systems are used. Some departments spend one half the school day in the shop, others spend the entire school day, followed by a school day of related and academic studies. Others operate with the pupils in the shop for an entire week, and alternate weeks instead of days. With two groups, any of these systems will keep the shops in use constantly. Each system has merits.

Some schools operate on a three year schedule, others

have four years of training. Others offer short unit courses of special training. Thirty per cent of the total time must be assigned to related work, and the remaining 20 per cent is allotted to academic studies.

Membership records of the pupils.- The usual routine records required in most public schools are kept in the vocational schools. Some are legal requirements, others are to facilitate the school routine. Usually they are centralized in the school office. Records of all pupils entering, 1/ transferring within the school, or discharged from the school, must be made with the local superintendent of schools and the State Division for Vocational Education. The latter record is required every four weeks. Teachers who are to contact the student must be notified of his status. Attendance records are kept by home room teachers and the central office. Blanks, forms and records for these data may vary in any community, with the exception of attendance records and reports in the central office, where standard forms are required by the State. 2/

At the conclusion of definite periods, usually every quarter, grades in all subjects and a summary of absences, tardiness, and dismissals are sent the parents and recorded in the office records. 3/

1/ Appendix- Page g

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Department teachers keep special records of time as required in their specific cases. A special book containing attendance records and grades, and organized for a school using alternate weeks in shop and related works is included. ^{4/} It follows the class from shop instructor to related instructor in a two group department.

Shop organization.- An environment comparable to that found in the special field, with progressive jobs or experiences chosen to increase the skills, abilities and attitudes of the student in that field, is the chief objective of the over all shop organization. Many factors enter the picture when an effective shop program is desired, such as the differences between fields or trades, and even the differences in instructors. Certain definite requirements are made of the shop instructor, but a good instructor will follow those instructions automatically and develop a smooth functioning, effective shop organization of his own that will meet most requirements.

Some of the important factors in that organization are;

- A. Build a democratic organization of student aid, allotting to each certain definite assignments within the shop, such as housekeeping.
- B. Organize a system for distributing and checking supplies. The teacher can easily become a checker, not an instructor.

- C. Organize an efficient tool room, for the distribution and checking of tools.
- D. Organize an effective method of handling routine records, such as time cards, progress records, attendance, notes and job cards.
- E. Allocate responsibilities on students whenever possible that are not distinct teacher responsibilities.
- F. Plan at least a days work for each individual and have all materials and equipment available.
- G. Plan for emergency jobs,
- H. Plan for alternate jobs.

Shop students.- Only regularly enrolled students of a department may enter into the shop program. Twenty students is the maximum number permitted by State regulations. Arbitrary figures should not be set, although such a ceiling or maximum is advisable. Where jobs take a long period of time, and require little supervision and instruction, the number may be 20 students. As in general education, the more popular courses may become overpopulated unless a ceiling is established, as the "cost per pupil" formula has become a mania with some administrators.

Shop progress records.- Definite jobs are laid out for

1. Organize an efficient staff, for the purpose of maintaining and conducting of books.

2. Organize an effective method of maintaining records, such as time cards, progress records, attendance, notes and job cards.

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4. Plan at least a day work for each individual and have all materials and equipment available.

5. Plan for emergency jobs.
6. Plan for alternate jobs.

Staffing - Only carefully trained students of a variety of age and sex should be employed. Twenty students is the maximum number permitted by State regulation. Voluntary workers should not be used, although such a call-in or maximum is desirable. Where jobs are long and tedious, the staff should include students and instructors, the number may be 20 students. As in general education, the more normal students may become overworked unless a call-in is established, as the "cost per unit" formula has become a standard for some administrations.

Student Records - The student record card for

each unit contained in the department course of study. The first job is simple, and each successive job should develop new skills, speeds or attitudes. The final job should be used as a proficiency test with trade speed and trade achievement used as standards for passing the work of that unit. A list of these jobs is the shop progress record, ^{1/} and a separate record must be kept for each student. Daily progress is usually kept on a master record, and the individual records copied from that.

Laying out the jobs is usually a cooperative activity of shop teachers, related teachers and the director. It must constantly be revised to cover new types of work or units, or to fit the jobs into available material and equipment.

Shop equipment.- Equipment includes all machines, apparatus, tools or furniture, not actually used up on the job. Sufficient equipment must be available in each shop to do all shop jobs listed in the progress record. This equipment, and any additions, must be furnished by the local authorities. State aid is given if the equipment wears out, becomes obsolete, or if any parts are actually replaced. It is imperative that an accurate inventory be kept of the original equipment and replacements, for the accountant must have this data to determine the amount of State reimburse-

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ment to the local school.

An equipment inventory should be kept yearly, and show (a) names and specifications (b) number on hand (c) number obsolete (e) number worn out and (f) number lost (g) number received during the year. 1/

Shop materials and supplies.- A supply or material is anything used up in a production job, such as lumber, steel, cement or paint. Sufficient materials with respect to quantity and type must be available for the shop instructor to effectively do the jobs included in his progress record. It is the responsibility of the shop instructor to order all necessary materials and also to devel an effective system to check and make available to the students, materials needed for the jobs. Electrical departments have many items of supplies used on every job. The cost would be terrific if an effective system was not established to control the loss and breakage. The problem differs in every department, so that the solution rests in the hands of the instructor. Some men handle the problem by checking each item out and into the supply room. Others have developed standard kits for certain units, and pass out the kits. When too many items are involved the student supply clerk is overloaded and nothing will be checked.

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Shop Jobs.- All jobs or projects developed in a shop should be on a productive basis. In other words, environment and achievement should be similar to that under which the same job would be produced in industry or the field. Routine jobs developed for the shop progress record, and outside jobs allied closely to those jobs, should be produced in an atmosphere and at standards generally accepted in that field.

A cabinet teacher must know the cabinet trade and the production methods used in that field, and duplicate those methods and conditions in his shop. Practice jobs are developed and used in all fields to develop certain skills. Material costs and proper type jobs regulate the actual productive jobs. Eventually skills, developed by practice jobs, are used in finished productive jobs. The student is really proficient when he can take an order, design or blueprint of a project and without instruction or aid, complete that project within the allotted time and have the finished project measure up to the standards set by that field. Materials, equipment and supplies should be available without bottlenecks in order to accomplish these objectives.

All shop work is organized on the basis of individual instruction and progress.

Preparation of the students for the shop jobs.- In

Shop Jobs. - All jobs or projects developed in a

shop should be ones of a progressive nature. In other words,

environment and achievement should be similar to that

under which the work would be produced in industry

or the field. Practice jobs developed for the shop pro-

gress record, and practice jobs should closely be those

jobs, should be produced in an atmosphere and at times

needs generally accepted in that field.

A capable teacher must know the cabinet trade and

the production methods used in that field, and duplicate

those methods and conditions in his shop. Practice jobs

are developed and used in all fields to develop certain

skills. Material costs and proper type jobs regulate the

actual productive jobs. Inversely skills, developed by

practice jobs, are used in finished productive jobs. The

student is really proficient when he can take an order,

draw or blueprint of a project and without instruction

or aid, recognize that project when he is given the

and have the finished project measure up to the standards

set by that field. Materials, equipment and supplies

should be available without restrictions in order to

encourage these activities.

All shop work is organized on the basis of individual

instruction and progress.

Integration of the shop with the other jobs. - In

the related room all relative information, such as mathematics, science, and drawing required in the jobs are studied. In some schools the actual jobs are completely developed in the related room and then the job done in the shop. Thus the development of all projects becomes one of the functions of the related instructor. In other schools the related classes receive all pertinent information as to supplies, material, theories, principles, and methods. This knowledge is organized into units, and offered just previous to the students entering into that unit in the shop. The student is supposed to carry over this information into his shop jobs.

In all cases, every student will know how to do a thing before starting a project or job. The correlation between the shop work and the related work is important. Effective development of the objectives in a department depends on that relationship.

Related room objectives.— Learning by doing has always been a slogan of vocational education. Increased technical knowledge is demanded in vocational fields, for industrial products have become more complex in nature. An apprentice going onto a job today cannot progress thoroughly unless he learns the underlying principles of that job. In other words, if he knows what he is doing he can make progress in that job. It is the function of related de-

the related room all activity, information, and learning is done in the
related room, and learning is done in the related room. In some schools the
related room is developed in the related room and then the job is done in the
shop. Thus the development of all projects becomes one of
the functions of the related room. In other schools
the related room receives all pertinent information as
to supplies, material, theories, principles, and methods.
This knowledge is organized into units, and all the
previous to the students entering into this unit in the
shop. The student is supposed to carry over this infor-
mation into his shop jobs.

In all cases, every student will know how to do a
thing before starting a project or job. The correlation
between the shop work and the related work is important.
Effective development of the objectives in a workshop
depends on that relationship.

Related room objectives. - Learning by doing has al-
ways been a slogan of vocational education. Increased
technical knowledge is demanded in vocational fields, for
industrial products have become more complex in nature. In
experiments going on today cannot progress thoroughly
if, unless he learns the underlying principles of the job.
In other words, if he knows what he is doing he can make
progress in that job. It is the function of the related room

partments to develop experiences in the classroom, so that the student on entering a shop to do a job may have developed a knowledge of how to do that job; know what he is doing and why; know what problems to expect while it is in progress; know the trade standards for that job.

Related room organizations.- Related rooms are organized by departments, and if the enrollment permits, all students should be on the same level. A maximum of 30 students is permitted.

Department jobs or units are broken down into main fields, usually mathematics, science, drawing, and related english. ^{1/}

In some schools this work is developed on a basis of those subjects. This is especially true in the larger schools, such as the Springfield Vocational School. There, all entering students study general mathematics, general science and general drawing as in a high school program. Then the various departments related teachers develop special applications of those subjects to the shop jobs, and the field. The correlation is critical and difficult to achieve.

In smaller schools the entire program is in the hands of the related teacher. In some fields he must have an ex-

cellent general education as well as trade background. He must develop sufficient knowledge in the student in all of those fields, so that a steady progress can be made in the shop program. In some schools a complete job analysis is made for every job in the related room; ^{1/} in other schools the projects are developed during the first jobs in a unit.

Irrespective of what system is used, no student is permitted in a shop unless he knows how to do the assigned job in a workmanlike manner. Correlation between shop and related rooms is one of the difficult problems facing any director and department organization.

Time cards for students.- In industry every worker must account for all of his working time. In a trade school time cards must be kept showing the date, job or project, and progress on the project or projects, and the time involved. This record must be available for inspections by the State Department. ^{2/}

Shop productive jobs.- The State is an active partner in maintaining and operating a vocational school, and should share in any income that the school may receive from shop productivity. Any materials used in production for which the school received a cash or credit, or if materials or

E/Appendix- Page w

2/ " " m

supplies were used to expand the equipment in the vocational school, must be reported on regular forms. ^{1/} Any labor credit or receipts must also be reported. ^{2/} This data is used by the State auditor to determine the net maintenance sum eligible for reimbursement to the local school.

Job orders may be issued from the office on request by anyone, ^{3/} after being signed by the director. Productivity of the school is determined from the job orders and as such are important records from the shop instructor. Productivity may involve a large market value but no financial return to the school.

Requisitions for materials and supplies.- In most schools, the orders originate from the department instructors, ^{4/} usually once a year. The director checks, eliminates or approves, and then the purchases are made according to the local system. Where a purchasing agent exists, that individual purchases what is ordered after he receives a requisition. ^{5/} Rigid specifications are a vital part of the order.

1/ Appendix- Page n, o, p

2/ " " n, o, p

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4/ " " r

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and this was used to expand the report in the year -
1901 school, and as reported on regular forms, and
later copies or receipts were also reported. This
data is used by the State auditor to determine the net
amount of receipts for maintenance of the local school.
The entire report is turned from the office on request
of the school is satisfactory from the Director. Productivity
are important results from the high instruction. Productivity
may involve a large number value but no financial return to
the school.

Regulations for receipts and credits. - In 1903

to 1903, the entire original from the Department Inspector,
usually once a year. The Director checks, eliminates or ap-
proves, and then the receipts are made according to the
local system. There is a proposed plan exists, that in-
clude a report made and is ordered after he receives a re-
ceipt. It is a receipt for the school and a receipt for the
order.

✓	Receipts - 1903	1903
✓	"	"
✓	"	"
✓	"	"
✓	"	"
✓	"	"

Emergency orders are necessary in any school of this type, chiefly to cover special jobs or maintenance. Some schools have emergency funds, others rotating funds for the purchase of small parts, such as radio tubes. Others have a blanket order fund in certain stores. 1/

In most cities in Massachusetts all money taken in must be turned over to the general city treasury. Thus any money used by the school for the purchase of materials going into an outside job, such as an axle for an automobile, will come out of the regular school appropriation, and the money is lost to the school. Many schools will request a customer to furnish the materials needed for their job, as the cost of materials used on jobs would use up their working budget.

An excellent policy is to forbid the collection of any money in the school for projects except in the office. This will protect the school and the instructor from unfair accusations.

Shop tool rooms.- Movable equipment and supplies should be stored in a safe place and be available for use when needed. The responsibility for this function will be placed in the hands of that individual using the equipment, materials or supplies. In a one man shop the responsibility is normally delegated to the shop instructor. In larger departments

where there are several instructors; or more than one instructor uses the shop or materials; a real problem will arise. Central tool rooms or supply rooms, where every item taken out is carefully checked, is the method usually followed. The instructor must constantly train and supervise the tool room personnel, as they are usually students of his department.

Safety education in vocational schools.- Accidents are a serious problem in industry and industrial schools, Whenever the possibility of an accident exists, the pupil should receive instruction that will produce safe work habits and reduce the probability of injury to a minimum. All machines should be completely guarded and no work of any type should be attempted unless standard safety devices, such as goggles for grinders, are available and in use.

Careless instruction, haphazard organization in the shop, or permitting hazzard conditions to exist, are not tolerated in a well organized school. Injuries and lawsuits might result, or indignant parents would rightly make vigorous protests. Detailed reports are required for all injuries.^{1/}

The majority of Vocational teachers, in Massachusetts carry insurance for protection against lawsuits. One case on record is of a boy operating a bandsaw which had all

There have been several instances where the
 of action has been the same or similar; a real problem will
 arise. General food stores or supply stores, where every item
 taken out is carefully checked, is the method usually fol-
 lowed. The inspectors are usually given and supervised
 the food store personnel, as they are usually students of the
 department.

Salary education in vocational schools. - Incidents are
 a serious problem in industry and vocational schools, where
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 receive instruction that will produce safe work habits and
 reduce the possibility of injury to a minimum. All machines
 should be completely guarded and no work of any type should
 be attempted unless standard safety devices, such as goggles
 for grinding, are available and in use.

General instruction, emphasized organization in the
 shop, or continuing hazard conditions to exist, are not
 corrected in a well organized school. Injuries and lawsuits
 might result, or negligent parents would rightly take action
 and sue. Detailed reports are prepared for all injuries.
 The majority of vocational teachers, in most instances
 carry insurance for protection against lawsuits. One case
 on record is of a boy operating a hand saw which cut off

approved guards, and a conspicuous sign reading "Do not use without receiving permission of the instructor". He did not receive permission, sat on a stool, (which is never done at that machine) lifted his knee under the table, and his knee was cut by the saw. He had been properly instructed; the machine had all approved guards and safety devices; and he had used the machine without permission. He sued the instructor, and the instructor spent 350 dollars defending and winning the case. Few cases are lost, but defending a lawsuit is a serious and costly experience. Primary responsibility is invested in the director, but the eventual responsibility for safety in a vocational school rests with the instructor. Safety instruction is an important feature of every unit. It is usually incorporated into both the related and the shop programs, and in some cases it is included in the hygiene program.

Marking in vocational school.- Vocational schools are organized on an individual basis, therefore the marking system should follow the individual through the various units or jobs. In a well organized school, marks should be by units and progress the same. In most of our schools however, the schools are organized by units and timed for the length of the school curriculum based upon an average student. Additional jobs or related principles are easily added to enrich any of the various units for the advanced

approved guides, and a consistent high reading. He did not without receiving permission of the instructor. He did not receive permission, and on a school, (which is never done in that machine) lifted his knee under the table, and his knee was cut by the saw. He had been properly instructed; the machine had all approved guides and safety devices; and he had used the machine without permission. He used the instructor, and the instructor spent 300 dollars obtaining and winning the case. Two cases are lost, but obtaining a lawsuit is a nervous and costly experience. Primary responsibility is invested in the director, but the eventual responsibility for safety in a vocational school rests with the instructor. Safety instruction is an important feature of every unit. It is usually incorporated into both the related and the shop programs, and in some cases it is included in the hygiene program.

Working in vocational school. - Vocational schools are

organized on an individual basis, therefore the working system should follow the individual through the various units or jobs. In a well organized school, marks should be by units and progress the same. In most of our schools however, the schools are organized by units and timed for the length of the school curriculum based upon an average student. Additional jobs or related principles are easily added to enrich any of the various units for the advanced

or brighter student, so that interesting progressive work always confronts each student.

Actual marks are awarded by letters or numbers, similar to regular high schools, as no satisfactory substitute has been found that is understandable by the parents and the student.

One problem in vocational education is that shop work cannot be home work. Attendance is extremely highly important for that reason. Medford has adopted an incentive marking system, and based a program around that idea. The school operates on the alternate week principle. Every days work is definitely assigned for each individual, and every hour of satisfactory work is a credit hour. A complete year is 1260 credit hours, with 3780 credit hours needed to graduate. An absence causes a loss of seven credit hours, and tardiness or dismissals are discounted by the time lost. A grade of B is credited with a five per cent bonus, and an A grade is credited with a bonus of ten per cent. 1/ The system is devised to encourage attendance and higher grades. The State requires a complete record of time for all students so this system causes little extra work. A page from the special class record book devised by that school is included. 2/

1/ Appendix - Page ac

2/ " " aa

Academic studies in vocational schools.- The student must spend 20 per cent of his time in regularly organized academic classes including english, history, citizenship, economics, hygiene and physical education. ^{1/} He must have a broad general education to supplement trade education, if he is to take his place in, and contribute to, a well organized society. The program is organized by subjects and units similar to a high school, except the units are organized for the individual rather than for groups.

In the final analysis, every teacher is an academic instructor, except that his classes are not organized in a similar manner. Vocational mathematics is general mathematics plus special applications to a varying degree. Every field which uses mathematics, whether it is banking, structures, machinest, bookkeeping or cost accounting, applies special methods that are not commonly found in any organized academic program, at either the high school or college level. Vocational education has added the specialized application for their specific fields.

English is the common denominator used by all. Every teacher has an intimate personal contact with his students, due to the small classes and long daily contacts. He has plenty of opportunity to offer individual correction of english and habits.

Academic studies in vocational schools. -- The student

must spend 30 per cent of his time in regularly organized academic classes including English, History, Civics, Science, Hygiene and Physical Education. He must have a broad general education to supplement trade education. It is to take his place in, and contribute to, a well organized society. The program is organized by subjects and units similar to a high school, except the units are organized for the individual rather than for groups. In the final analysis, every teacher is an academic instructor, except that his classes are not organized in a similar manner. Vocational mathematics is general mathematics plus special applications to a varying degree. Every field which uses mathematics, whether it is building, engineering, mechanics, bookkeeping or cost accounting, offers special methods that are not commonly found in any organized academic program, at either the high school or college level. Vocational education has added the special application for these specific fields. English is the common denominator used by all. Every teacher has an intimate personal contact with his students, one to one classes and long daily contacts. He has plenty of opportunity to offer individual correction of English and habits.

The background of any trade becomes a good foundation of history, geography, citizenship and economics. The place of the field in the social and economic system is a direct personal contact with actual life. With materials such as that mentioned above, department and academic teachers have a vast storehouse of interesting material that provides incentive and motivation. Most of the vocational academic programs incorporate intimate local interests into their organized programs.

Placement function in vocational schools.- Graduates of any specialized school are not completely trained until they have had an opportunity to practice their special skills after graduation. Trade school graduates are usually scattered among many employers. In the past, finding those employers by the graduates and selling themselves and their training has proved ineffective. Today all of the large vocational schools have a full time, or part time, placement department. The representative is the coordinating agent between the school and employers, for he is the official representative from the school in selling its products and reporting their progress. The accepted policy adopted by the State is to place all graduates, and to aid, guide, follow up, ^{1/} and replace them is necessary for a period of five years.

The placement department must have a thorough knowledge of, places of employment 1/ and employers, as well as a complete employment and statistical record of all students in the school and the graduates of the school. 2/ Every four weeks he must make a complete report to the State on all dropouts and placements. 3/

Guidance in the trade schools.- Trade schools are specialized schools where the entire program is organized into definite objectives. The guidance program should direct those students with the proper aims, aptitudes, abilities, physique, background and interests into the various vocational fields, and as such should be pre-vocational in nature. Organized guidance in vocational schools is limited as a rule to following up of all students, and making sure that they are progressing, happy, satisfied, and interested in their work. The problem of organized guidance encountered at the time when a student applies for entrance was discussed on Page 70, "Methods used in the relection of students". It is the most important organized guidance function in vocational schools, and is a direct responsibility of the director.

The director of one school interviews each entering student at the end of his first four weeks at the school, and at

1/ Appendix- Page ae, af

2/ " " ag, ah

3/ " " aj

The placement department must have a thorough knowledge of
 places of employment, and employers, as well as a complete

employment and educational record of all students in the
 school and the character of the school. Every four weeks
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 and placements.

Guidance in the Trade School - Trade schools are de-

signed schools where the entire program is organized into
 definite objectives. The guidance program should direct those
 students with the proper aims, attitudes, abilities, and
 background and interests into the various vocational fields.

and it should be pre-vocational in nature. Organized
 guidance in vocational schools is limited in a wide range of

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 pressing, happy, satisfied, and interested in their work. The
 problem of organized guidance encountered at the time when a
 student applies for entrance was discussed on page 10. Methods
 used in the selection of students. It is the most important
 organized guidance function in vocational schools, and is a
 direct responsibility of the director.

The director of one school interviews each entering stu-
 dent at the end of his first four weeks at the school, and at

V	Personal - Page 22, 23
2	" " " "
3	" " " "

the conclusion of his first school year. He will of necessity see all dissatisfied or troublesome cases as a routine duty.

The main difference between high school teachers and vocational instructors is the direct responsibility of department instructors for the individual development of all students in a department. Department classes are small and the instructor has each student for long periods of time. In some cases this is 80 per cent of the total time. Any development in habits, skills, attitudes and progress can usually be traced to the instructors of a department. Placement and follow-up reports will determine to a large extent the effectiveness of the department. With this organization it is possible to do a large amount of personal individual supervision and guidance. A good instructor will automatically assume these obligations and eliminate the necessity of many guidance functions assumed by some guidance departments.

Office records in vocational schools.- Attendance records have already been mentioned. Other data, such as history and census, grades, and employment record are included in the file of each student, very similar to those used in a general school. ^{1/}

Vocational schools are organized as in any business where books must be audited by accountants. The vocational schools are audited by the State accountants. Non-resident tuition, cash receipts, credits, productivity, materials and supplies, equipment replacement, equipment, maintenance and salaries, all must be listed and used to determine the net maintenance cost of the school. The State will reimburse the local community 50 per cent of this cost after the accounts are audited. Regular State forms are used for all parts of this work in order to facilitate and standardize the auditing.

Records required by the State for approved schools, such as, names and addresses of the board of control, the executive officer, courses of study, student enrollment records, list of the faculty, time schedule, division of time for each student, shop organization and progress records, related organization and progress records, academic progress records, equipment inventories, and list of advisory committees, should be filed in the office as part of the office records.

State supervision of vocational schools.- The vocational school law is specific and definite as to what type of education shall benefit from the law. The State department acts as guide and interpreter of activities in the local schools. They represent the Commissioner, and he

legally cannot approve for reimbursement any school not operating within his interpretations of the vocational laws. State supervisors must visit the local schools to check their various fields or specialties, and return necessary data for the guidance of the Commissioner.

Various rating charts have been used by the State supervisors. ^{1/} In Massachusetts they have used their supervisory powers in an advisory rather than inspectional manner, with the ultimate objective of improving and expanding local vocational education. They can be a powerful force in a community where an established school is being neglected, for they can recommend withholding of approval to the Commissioner. In general however, local schools and the supervisors of the State department work in harmony, with the common objectives of promoting and improving vocational education.

Statistical.- Massachusetts in 1944 had in operation 42 boys day industrial State-Aided vocational schools, enrolled 9917 students, and employed a faculty of 636 men. ^{2/} These figures will probably increase, for the trend is definitely towards a 6 hour day, 30 hour week in Massachusetts.

^{1/} Appendix- Page x

^{2/} Digest of Annual Reports-Op. Cit- Appendix Tables No.1

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aj	Four Week Placement and Discharge Report To The State.....
ak	State Supervisors Report.....
al	Non-Relief Progress Report and Discharge Report.....
am	Monthly Attendance Report To State - Month.....
an	Relief Progress Report, Placement Department - Back.....
ao	Vocational School Record Card.....

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APPLICATION BLANK — Medford Vocational School

Name in full..... Date of application.....
Last name First name Middle name
Number..... Street.....
City or town..... Telephone number.....
Age, September 1st,..... Years..... Months.....
Date of birth, Year..... Month..... Day..... Birthplace.....
Last school attended..... Total attendance..... Date of leaving.....
Grade left..... Age at leaving.....
Did he graduate or complete the grade.....
Reason for leaving.....
Last occupation.....
Name of parent or guardian.....
Occupation of parent or guardian.....
Business address.....
Father's birthplace..... Mother's birthplace.....
☐ Auto Mechanics ☐ Machine Shop ☐ Printing
☐ Cabinet Making ☐ Painting and Decorating ☐ Sheet Metal
☐ Electrical I hereby approve of my son's (or ward's) choice of a trade
.....
Date of entrance..... Father or Guardian..... Mother.....

Application Card - Front

Abolition Club - Boston

Previous School Record of 1891 Class 61700000

First Name	Last Name	Age	Sex	Color	Religion	Occupation	Address	Previous School Record
John	Smith	18	M	W	Episcopal	Teacher	123 Main St.	...
Mary	Johnson	16	F	W	Baptist	Homemaker	456 Elm St.	...
James	Wilson	15	M	W	Methodist	Student	789 Oak St.	...
Elizabeth	Brown	14	F	W	Presbyterian	Homemaker	101 Pine St.	...
Robert	Miller	13	M	W	Anglican	Student	202 Cedar St.	...
Sarah	Davis	12	F	W	Quaker	Homemaker	303 Birch St.	...
William	Garcia	11	M	W	Catholic	Student	404 Maple St.	...
Anna	Lee	10	F	W	Protestant	Homemaker	505 Elm St.	...
Thomas	White	9	M	W	Anglican	Student	606 Oak St.	...
Charlotte	Harris	8	F	W	Baptist	Homemaker	707 Pine St.	...
Charles	Clark	7	M	W	Methodist	Student	808 Cedar St.	...
Frances	Roberts	6	F	W	Presbyterian	Homemaker	909 Birch St.	...
Edward	King	5	M	W	Anglican	Student	1010 Maple St.	...
Isabella	Wright	4	F	W	Quaker	Homemaker	1111 Elm St.	...
George	Scott	3	M	W	Catholic	Student	1212 Oak St.	...
Emily	Green	2	F	W	Protestant	Homemaker	1313 Pine St.	...
Frederick	Adams	1	M	W	Anglican	Student	1414 Cedar St.	...

Previous School Record

PREVIOUS SCHOOL RECORD OF LAST GRADE ATTENDED

Subject	Rank	Subject	Rank

Times Tardy..... Times Dismissed..... Days Absent.....
Principal's Signature.....

MACHINE PERMIT

DEAR SIR:
Your ^{son} ward
has selected, as a part of his program, a course calling for the use of power-driven machinery. All machines are well-guarded for the operator and every possible precaution will be taken by the instructor to insure the correct and proper use of these machines by the boys who use them.

Before your ^{son} ward will be permitted to operate these machines it will be necessary for you to give your consent by signing the statement below.

I hereby give my ^{son} ward
permission to use all power-driven machinery connected with the course he has selected and hereby release the City of Medford, the School Department, and all the instructors and employees of the School Department from any claim whatsoever for damages in case of accident to my ^{son} ward while working with this machinery.

Date..... Parent's or Guardian's Signature.....
Residence.....

Application Card- Back

To be filled in by last school attended.

To be filled in by parent or guardian.

1

2

3

4

Pupil Rating Card From Junior High School

PERSONAL CHARACTERISTICS RATING CHART

Pupil's Name _____ Division _____ Teacher _____

Each of the factors listed below is to be rated on a three-point scale. Will you please rate your pupils with respect to each question by placing a check mark in the square which represents your evaluation of the pupil.

1. COÖPERATION	Actively works for class and school and common good of all <input type="checkbox"/> Works well with others and does his share . . . <input type="checkbox"/> Unwilling to co-operate. Indifferent <input type="checkbox"/>	Please record here instances to support your judgment.	5. INITIATIVE	Can originate projects and develop suggestions when occasion arises <input type="checkbox"/> Can start and carry through project when assisted . . . <input type="checkbox"/> Needs to be prodded. Never seems to show initiative <input type="checkbox"/>	Please record here instances to support your judgment.
2. HONESTY (In Actions)	Very high ideals of honesty—absolutely trustworthy. <input type="checkbox"/> Somewhat lower ideals . . . <input type="checkbox"/> Poor ideals of honesty. <input type="checkbox"/>	Please record here instances to support your judgment.	6. NEATNESS	Unusually neat and clean. <input type="checkbox"/> Neat and orderly . . . <input type="checkbox"/> Slack—untidy <input type="checkbox"/>	Please record here instances to support your judgment.
3. INDUSTRY	Exceedingly diligent. Effort superior <input type="checkbox"/> Faithful and willing, effort good <input type="checkbox"/> Lazy, effort poor . . . <input type="checkbox"/>	Please record here instances to support your judgment.	7. RELIABILITY	Has won complete confidence. Can always be relied upon <input type="checkbox"/> Not reliable on all occasions <input type="checkbox"/> Unreliable <input type="checkbox"/>	Please record here instances to support your judgment.
4. APPLICATION	Quick to grasp instruction and think intelligently . <input type="checkbox"/> Does what he is told to do faithfully. Little instruction. <input type="checkbox"/> Forgets or misinterprets instruction. Makes many mistakes <input type="checkbox"/>	Please record here instances to support your judgment.	8. LOYALTY	Very high ideals of loyalty—outstanding school spirit . <input type="checkbox"/> Somewhat lower ideals. School spirit usually good. <input type="checkbox"/> Poor ideals—scoffing attitude. Fails to support school functions <input type="checkbox"/>	Please record here instances to support your judgment.

9471-5-44-500

8166-9-39-500

MEDFORD VOCATIONAL SCHOOL

ENTRANCE SLIP

Name Date

Department Div.

Teacher

Room Number

Signature

Please return this slip to the office

Entrance Slip Sent From The Office To The Teachers

9786-11-45-500

MEDFORD VOCATIONAL SCHOOL

DISCHARGE SLIP

Please return this slip to the office

Name Date

Department Div.

Teacher

Room Number

Signature

Please fill in information on reverse side

Discharge Slip Sent From The Office To The Teachers

CENSUS CARD

1. Last Name	2. First Name and Initial	3. Date of Birth Year _____ Month _____ Day _____		
4. Present Residence	5. School Last Attended	6. Total Attendance Y _____ M _____	7. Date of Leaving	8. Grade Left
9. Age at Leaving Years _____ Months _____	10. Reasons for Leaving		11. Rating	

VOCATIONAL SCHOOL PERIOD

12. Date of Entrance	13. School	14. Department	15. Date of Leaving	16. Reason for Leaving	17. Length of Attendance	
					Years	Mos.
					"	"
					"	"
					"	"

SUBSEQUENT PERIOD

[illegible]

State And Local Census Card- Front

10m(a)-12-44-15380

SUBSEQUENT PERIOD
CONTINUED

[illegible]

State And Local Census Card- Rear

MEDFORD
VOCATIONAL SCHOOL

PROGRAM
OF
STUDIES

Nineteen Hundred and Forty Five



APPROVED BY
THE SCHOOL COMMITTEE
MEDFORD, MASSACHUSETTS

VOCATIONAL CURRICULUM

Three-year Course

ACADEMIC SUBJECTS (20% of time)

English

History { Industrial History
(First two years)
United States History
(Last year)

Citizenship and Economics

Hygiene

Physical Education

RELATED WORK (30% of time)

Related Mathematics

Related Science

Related Drawing

Related English

SHOP WORK (50% of time)

Auto Mechanics

Cabinet Making

Electricity

Machine Shop

Painting and Decorating

Printing

Sheet Metal

SCHOOL DAY

MORNING SESSION..... 8:00 A. M. to 11:55 A. M.3 hrs. 55 min.

RECESS..... 11:55 A. M. to 12:25 P. M.

AFTERNOON SESSION .. 12:25 P. M. to 3:30 P. M.3 hrs. 5 min.

Length of school day.....7 hours Hours per week.....35

One full week of Shop work and the following week Related and Academic work. 50% Shop, 30% Related and 20% Academic.

PAINTING AND DECORATING TRADE

ACADEMIC WORK

Subjects	Periods	Time	Minutes	Total
English	5	53 minute periods	265	
History (Industrial)	3	" " "	159	
Citizenship and Economics	3	" " "	159	
Hygiene	2	" " "	106	
Physical Education	2	43 " "	86	
	<hr/> 15		<hr/>	775

RELATED WORK

Related Mathematics	6	53 minute periods	318	
Related Science	6	" " "	318	
Related Drawing	12	" " "	636	
Related English	1	" " "	53	
	<hr/> 25		<hr/>	1325
	40			<hr/> 2100

PRINTING TRADE

ACADEMIC WORK

Subjects	Periods	Time	Minutes	Total
English	5	53 minute periods	265	
History (Industrial)	3	" " "	159	
Citizenship and Economics	3	" " "	159	
Hygiene	2	" " "	106	
Physical Education	2	43 " "	86	
	<hr/> 15		<hr/>	775

RELATED WORK

Related Mathematics	5	53 minute periods	265	
Related Science	6	" " "	318	
Related Drawing	8	" " "	424	
Related English	6	" " "	318	
	<hr/> 25		<hr/>	1325
	40			<hr/> 2100

AUTOMOBILE TRADE

ACADEMIC WORK

Subjects	Periods	Time	Minutes	Total
English	5	53 minute periods	265	
History (Industrial)	3	" " "	159	
Citizenship and Economics	3	" " "	159	
Hygiene	2	" " "	106	
Physical Education	2	43 " "	86	
	<hr/> 15		<hr/>	775

RELATED WORK

Related Mathematics	6	53 minute periods	318	
Related Science	9	" " "	477	
Related Drawing	8	" " "	424	
Related English	2	" " "	106	
	<hr/> 25		<hr/>	1325
	<hr/> 40			<hr/> 2100

CABINET MAKING TRADE

ACADEMIC WORK

Subjects	Periods	Time	Minutes	Total
English	5	53 minute periods	265	
History (Industrial)	3	" " "	159	
Citizenship and Economics	3	" " "	159	
Hygiene	2	" " "	106	
Physical Education	2	43 " "	86	
	<hr/> 15		<hr/>	775

RELATED WORK

Related Mathematics	6	53 minute periods	318	
Related Science	8	" " "	424	
Related Drawing	10	" " "	530	
Related English	1	" " "	53	
	<hr/> 25		<hr/>	1325
	<hr/> 40			<hr/> 2100

ELECTRICAL TRADE

ACADEMIC WORK

Subjects	Periods	Time	Minutes	Total
English	5	53 minute periods	265	
History (Industrial)	3	" " "	159	
Citizenship and Economics	3	" " "	159	
Hygiene	2	" " "	106	
Physical Education	2	43 " "	86	
	<hr/> 15		<hr/>	775

RELATED WORK

Related Mathematics	6	53 minute periods	318	
Related Science	10	" " "	530	
Related Drawing	8	" " "	424	
Related English	1	" " "	53	
	<hr/> 25		<hr/>	1325
	<hr/> 40			<hr/> 2100

MACHINE TRADE

ACADEMIC WORK

Subjects	Periods	Time	Minutes	Total
English	5	53 minute periods	265	
History (Industrial)	3	" " "	159	
Citizenship and Economics	3	" " "	159	
Hygiene	2	" " "	106	
Physical Education	2	43 " "	86	
	<hr/> 15		<hr/>	775

RELATED WORK

Related Mathematics	6	53 minute periods	318	
Related Science	6	" " "	318	
Related Drawing	12	" " "	636	
Related English	1	" " "	53	
	<hr/> 25		<hr/>	1325
	<hr/> 40			<hr/> 2100

PROGRAM OF STUDIES

*General
Vocational Department*

MEDFORD
VOCATIONAL SCHOOL

Medford
Massachusetts

General Vocational Department

OBJECTIVES:

To meet the need of the over-aged and slow-learning pupil; to assist the pupil who does not intend to spend a long time in school; and to offer him an opportunity to secure some training that may help him in securing employment.

SELECTION OF PUPILS:

Pupils should be selected very carefully by the Guidance Department of the School System.

PLACEMENT:

The school will attempt to place all pupils who merit such consideration.

The pupils who meet the requirements of the Unit Trade School will be transferred to the Vocational School.

PERIOD OF TRAINING:

The period of training may vary from six months to two years depending upon the age of the pupil and the work for which he is being prepared.

SCHOOL DAY:

8:00 A.M. to 2:30 P.M. (Length of Day — 6 hours)

Hours per week — 30 (Recess $\frac{1}{2}$ hour)

ACADEMIC SUBJECTS

(15% of time)

English

History

Citizenship and Economics

Hygiene

RELATED WORK

(25% of time)

Related Mathematics

Related Science

Related Drawing

Related English

Physical Training

SHOP WORK

(60% of time)

Cabinet Making

Electricity

Machine Shop

Sheet Metal

Wood Finishing



MEDFORD VOCATIONAL SCHOOL

School Year, Sept., 19 June, 19

RECORD OF

NAME

DEPARTMENT

SUBJECTS	Sept. to Nov.	Sept. to Jan.	Sept. to April	Sept. to June
ACADEMIC				
English				
History				
Citizenship and Economics				
Hygiene				
RELATED				
Mathematics				
Science				
Drawing				
English				
Physical Training				
Shop Work				
Days Absent				
Times Tardy				
Times Dismissed				
Hours Short (Cumulative)				

SCALE OF MARKING

- A: Excellent
- B: Good
- C: Fair
- D: Failure (may be made up)
- E: Failure

Total Credits

MELVIN V. WELDON
Director

(OVER)

PLEASE READ CAREFULLY

Report Cards are issued during November, January, April, and at the end of the school year in June.

Credits are granted on the basis of hours of satisfactory work completed and are evaluated from marks daily received. 3,780 credits are required for graduation. One credit represents one hour of satisfactory work. The relation between credits and actual hours is fixed as follows:

A work: Total hours plus ten per cent. additional credits.

B work: Total hours plus five per cent. additional credits.

C work: Total hours.

D work: Sixty per cent. of total hours.

E failure: No credit.

Credits lost in any subject must be made up.

The system of marking is cumulative. The mark given at the end of each marking period indicates the pupil's standing from the beginning of the year to date. The final mark in June, therefore, indicates the pupil's accomplishment in each subject for the entire year.

CREDITS TO DATE

Class I II III

Promoted

Not Promoted } to grade

The signature of the parent or guardian in the space below, signifies that the parent has carefully examined this report.

PARENT'S OR GUARDIAN'S SIGNATURE

1

2

3

4

9514-9-44-500

MEDFORD VOCATIONAL SCHOOL
MEDFORD, MASS.

EQUIPMENT INVENTORY

Department		Date	
Amount Standard Equipment	Amount on Hand September	ITEM SIZE, MANUFACTURER and TOOL NUMBER	Replacement Necessary
			<div style="display: flex; justify-content: space-between;"> <div>Received during the year</div> <div>On Hand close of school</div> <div>Obsolete</div> <div>Worn Out</div> <div>Lost</div> </div>

MEDFORD VOCATIONAL SCHOOL

School Year, Sept., 19 _____ June, 19 _____

RECORD OF

NAME _____

ADDRESS _____

SUBJECTS	GRADE			
	Sept. to Nov.	Dec. to Feb.	March to April	May to June
English				
History				
Civics and Economics				
Hygiene				
Mathematics				
Science				
Physical Training				
Music				
Art				
Home Economics				
Foreign Languages				
Other				
Days Present				
Days Absent				
Days Excused				
Days Served (Con. duties)				

SCALE OF MARKING

- A. Excellent
- B. Good
- C. Fair
- D. Satisfactory (may be made up)
- E. Failure

Total Credits _____

MALVIN V. WALDON

Director

(over)

PLEASE READ CAREFULLY

Report Cards are issued during November, January, April, and at the end of the school year in June.

Credits are granted on the basis of 180 hours of satisfactory work completed and are equivalent to one-half day's credit. 3.75 credits are required for graduation. One credit represents one hour of satisfactory work. The relation between credits and actual hours is fixed as follows:

A. work: Total hours plus ten per cent additional credits.

B. work: Total hours plus five per cent additional credits.

C. work: Total hours.

D. work: Sixty per cent of total hours.

E. failure: No credit.

Credits lost in any subject must be made up.

The system of marking is cumulative. The mark given at the end of each marking period indicates the pupil's standing from the beginning of the year to date. The mark made in June, therefore, indicates the pupil's accomplishment in each subject for the entire year.

CREDITS TO DATE

Class I _____ II _____ III _____

Promoted _____ to grade _____

The signature of the parent or guardian in the space below, signifies that the parent has carefully examined this report.

Parent's or Guardian's Signature _____

1 _____

2 _____

3 _____

4 _____

65-1944-800

INSTRUCTOR

Progress Record Units

1. FRAME AND SPRING
2. FRONT END AND STEERING
3. CLUTCH AND TRANSMISSION

Automobile Progress Record

SHOP UNITS	Cumulative		
	1 yr	2 yr	3 yr
4. Adjust fan belt			
5. Check thermostat operation . . .			
6. Replace packing gland on water pump—overhaul			
7. Test winter solution			
8. Soldering			
UNIT X—BATTERIES			
1. Test battery			
2. Remove and replace battery . . .			
3. Inspect battery connections . . .			
4. Change battery cable			
5. Put battery on charge			
UNIT XI—ENGINES			
1. Tighten engine supports			
2. Clean and adjust spark plugs . . .			
3. Remove and replace cylinder head			
4. Clean carbon			
5. Grind valves			
6. Adjust tappets			
7. Reseat valve seats			
8. Reface valves			
9. Adjust connecting rod bearings . .			

Shop Progress Record.

n
1

MEDFORD VOCATIONAL SCHOOL
Electrical Dept. *SHOP ORDER*

Job No. Date 193

Name of article Number

Specifications

Ordered by

Address Tel. No.

Remarks:

Estimated time

(OVER) *Director*

Shop Order Issued By The Local School (Front)

Start	Finish	Job No. 1711		
BOYS	TIME	MATERIAL	COST	
Total				
Estimate of Mechanic's Time		Total		

		<i>TERMS</i>	
Value of Material furnished by School	\$	Cash	\$
Value of Material furnished by Customer,	\$	Credit	\$
Value of Labor	\$	Equivalent	\$
Market Value	\$	No return	\$
Service Value	\$		

Shop Order Issued By The Local School (Back)

MEDFORD VOCATIONAL SCHOOL AUTOMOBILE DEPARTMENT

Name..... Date.....
Address..... Job No. 1132
Make..... Registration No.....
Director.....

[illegible]

Start

Finish

Job No. 1132

BOYS	TIME	MATERIAL	COST	
Total				
Estimate of Mechanic's Time			Total	

Estimate of Mechanic's Time

Total

TERMS

				TERMS
Value of Material furnished by School	\$		Cash	\$
Value of Material furnished by Customer,	\$		Credit	\$
Value of Labor	\$		Equivalent	\$
Market Value.	\$		No Return	\$
Service Value.	\$			

JOB ORDER SLIP

Date Department

Name of Article

Number Wanted When Promised

Specifications:

.....

.....

.....

.....

.....

.....

Ordered By

Address St. Tel.

Instructor's Sig. Estimated Cost

Office Signature

Form Used By Customers. For Requisitioning Jobs

Purchasing Agent, City of Medford

REQ. No. 20526

DATE-

[illegible]APPROPRIATION
CHARGED

**SIGN
HERE.**

HEAD OF DEPT.

Requisition Sheet

Name of Pupil		Date	
Address		School	
Description of Accident			
Cause of Accident			
Injury Sustained			
Treatment			
Remarks			

MEDFORD PUBLIC SCHOOLS

MEDFORD, MASSACHUSETTS

PUPIL ACCIDENT REPORT

Name of Pupil Address

Grade Age Teacher

Name of Parent or Guardian

Date Time A.M. P.M. Place

Cause of accident

Nature of injury

Were other pupils involved?

Was a school physician or other physician called to attend the pupil?

If so, give name of physician

Was a school nurse called? If so, give name of nurse

What emergency treatment was given the pupil?

By whom was treatment given?

Was the parent immediately notified of the accident?

Was the pupil sent home?

Did he walk home or was a conveyance furnished?

Was someone sent home with the pupil? If so, who?

Additional remarks:

School Signature of Teacher

Date Signature of Principal

Small Accident Report.

Number.....

Name _____ Division _____

[illegible]



Public Accident Report.

Number.....

Name _____ Division _____

Approved by Instructor

THE WEEK'S WORK
MEDFORD VOCATIONAL SCHOOL
RELATED
(To be made out daily by pupil)

Name	Division
------------	----------------

[illegible]

Approved by Instructor _____

<i>Automobile Progress Record</i>			
RELATED UNITS	Cumulative		
	1 yr	2 yr	3 yr
UNIT X—BATTERIES			
1. Process of building			
2. Materials.			
3. Sulphuric acid.			
4. Lead, separators, case			
5. Lead burning, sealing compound			
6. Electrolyte			
7. Charging.			
8. Care and operation			
UNIT XI—ENGINES			
1. Name and location of parts			
2. Care and adjustments of spark plugs			
3. Cylinder heads, types, construction.			
4. Reason of carbon deposits			
5. Motor theory, four-stroke cycle			
6. Combustion, compression, valves			
7. Clearances of connecting rods, journals, pistons, and rings			
8. Timing motor, ignition, tune up			
UNIT XII—FUEL SYSTEM			
1. Distillation of gasoline			
2. Gasoline feed systems			

Related Progress Record.

STOCK

MATHEMATICS

Working Sketch

Notes

TOOLS

1
2
3
4
5
6
7
8
9
10

OPERATIONS

1
2
3
4
5
6
7
8
9
10

DEPT.

NAME

PROJECT

DATE

MATERIALS

MEDFORD VOCATIONAL SCHOOL

JOB ANALYSIS

9803 2 46-6,000

Forms & Paper Used In Related Work

MEDFORD VOCATIONAL SCHOOL

SCIENCE

SUBJECT	GRADE
Spelling	
Penmanship	
Arrangement	
Neatness	
Material	
TOTAL	

Department.....Date.....

Name.....Time.....

Kind of Job.....No.....

9369-3-44-12,000

MEDFORD VOCATIONAL SCHOOL

DRAWING

SUBJECT	GRADE
Spelling	
Penmanship	
Arrangement	
Neatness	
Material	
TOTAL	

Department.....Date.....

Name.....Time.....

Kind of Job.....No.....

9371-3-44-30,000

MEDFORD VOCATIONAL SCHOOL

MATHEMATICS

SUBJECT	GRADE
Spelling	
Penmanship	
Arrangement	
Neatness	
Material	
TOTAL	

Department.....Date.....

Name.....Time.....

Kind of Job.....No.....

<i>Printing Progress Record</i>			
ACADEMIC UNITS	Cumulative		
	1 yr	2 yr	3 yr
3. Colonial Industries			
4. The Systems of Labor			
NATIONAL DEVELOPMENT (1763-1860)			
1. Revolution and Re-organization			
2. The Westward Movement			
3. Agriculture			
4. The Industrial Revolution			
5. Transportation and Communica- tion			
6. Labor Conditions and Organiza- tion			
7. Slavery in the United States			
ECONOMIC DEVELOPMENT (1860-1900)			
1. The Civil War: the New Industrial Revolution			
2. Agriculture			
3. Business Consolidation			
4. Transportation and Communica- tion			
5. The Emergence of the Labor Prob- lem			

Academic Progress Record.

Printing Program Revised

ACADEMIC COURSE		1940-1941	1941-1942
MODERN AMERICA (1900-1940)			
1. The Era of Reform			
2. Labor and Labor Organization			
3. Agriculture as a Factor			
4. Transportation and Communication			
5. The World War			
6. Economic Collapse			
7. The New Deal			
CITIZENSHIP-ECONOMICS			
INDUSTRIAL ECONOMICS			
1. The individual in organized industry			
2. The individual in his relation to public and private agencies			
3. The individual managing money			
4. The individual worker in a field of occupation presenting distinctive opportunities (job analysis)			
5. The individual worker in relation to specific jobs, economic costs, and problems			
6. The individual in a world economy			

MEDFORD VOCATIONAL SCHOOL

ENGLISH

Department.....Date.....

Name.....Time.....

Kind of Job.....No.....

SUBJECT	GRADE
Spelling	
Penmanship	
Arrangement	
Neatness	
Material	
TOTAL	

9366-5-44-10,000

MEDFORD VOCATIONAL SCHOOL

CITIZENSHIP

Department.....Date.....

Name.....Time.....

Kind of Job.....No.....

SUBJECT	GRADE
Spelling	
Penmanship	
Arrangement	
Neatness	
Material	
TOTAL	

9758-11-45-20,000

MEDFORD VOCATIONAL SCHOOL

HISTORY

Department.....Date.....

Name.....Time.....

Kind of Job.....No.....

SUBJECT	GRADE
Spelling	
Penmanship	
Arrangement	
Neatness	
Material	
TOTAL	

Class Record Book

NON-RESIDENT APPLICATION DAY VOCATIONAL SCHOOL

Form A

MASS. STATE DEPARTMENT OF EDUCATION—Boston

Read instructions and regulations on reverse side of sheet & before filling out.

Name _____ (City) (Town) _____
 Residence in _____ (P. O. Address) _____
 Date of birth _____
 Date of entry into school _____

Medford Vocational School

Medford, Massachusetts

TRIAL REPORT

Pupil's Name _____ Dept. _____

The pupil whose name appears above is on trial in this department.

Subject	Passing			Failing			Remarks
CIVICS							
ENGLISH							
HISTORY							
DRAWING							
MATH.							
SCIENCE							
SHOP							

PASSING

1. Good
2. Satisfactory
3. Doubtful

FAILING

1. Irregular Attendance
2. Carelessness
3. Lack of Application
4. Indifference
5. Assignments not complete
6.

This report should be sent to office at the end of each two week period.

The minimum trial period is to be six weeks. At this the department in which the pupil is on trial should make a time report on pupil's standing.

Date _____ 19____

Report Card Used During The Try-Out Period

Sheet A, Section I, Procedure. Upon application for admission the Director of the school shall fill out Section I, Sheet A, and one of the other three sheets provided on Section I of Sheets B and C, which are to be kept in reserve (note Procedure written at bottom of Sheet B and C). Sheet A is given to the applicant with instructions to present it personally to the Superintendent of schools in his home town, so that when filling out Section II the Superintendent may have a personal knowledge of the applicant. Section II, Procedure. In case of an applicant the Superintendent shall fill out and sign this section and return the sheet to the Director of the school within ten working days of application.

(OVER)

Rev. 11-11-1917

NON-RESIDENT APPLICATION
DAY VOCATIONAL SCHOOL

Sheet A

To—MASS. STATE DEPARTMENT OF EDUCATION—Boston

Note instructions and information on reverse side of Sheet A before filling out.

SECTION I.—To be filled out by
Vocational School Authorities

I, M Enrollment, dismissal and
Residing in(City) (Town) removal dates:
.....(P. O. Address)
Born in year.....month.....day.....
wish to enter the.....
.....
on.....(date) to take course of
training in
This application has the approval of Parent or
Guardian:
Residing at
This application has been received and signed by (Director)
(City) (Town) of.....Date of application.....

SECTION II.—To be filled out by
Supt. of Schools in pupil's home town

On.....	Notified	Date
	(to be filled out by State office)	
M		
presented this application. I (do) (do not)		
approve admission. (If you disapprove,		
state objections below.)		
.....		
Signed	Superintendent of Schools.	
(City) (Town) of.....	Date of Signature.....	
(Follow procedure below and note information on reverse side of Sheet A.)		

SECT. III.—To be
executed by State

The State Department of Education, observing that the above application and its approval, has been properly filled out, hereby approves said application. The (Town) (City) of
will be liable for the payment of tuition at the rate of.....
from
as provided for in sections 7, 7A, and 8 of chapter 74 of the General Laws, and will be reimbursed therefor as provided for in Section 10, provided the department is approved for reimbursement.

(See sections 7, 7A, 8 and 10, on reverse side of this blank.)

Sheet A, Section I. Procedure.—Upon application for admission the Director of the school shall fill out Section I, Sheet A, making at the same time carbon records on Section I of Sheets B and C, which are to be kept in reserve (note Procedure written at bottom of Sheets B and C.)

Sheet A is given to the applicant with instructions to present it personally to the superintendent of schools in his home town, so that when filling out Section II the superintendent may have personal knowledge of the applicant.

Section II, Procedure.—On receipt of application the superintendent shall fill out and sign this section and return the sheet to the director of the school within ten days from date of application.

(OVER)

settles training schools for the whole amount so expended.

Section 10. The commonwealth shall reimburse towns paying fees under section 8 for tuition in agricultural departments in high schools to the same extent as is provided by chapter 71 in the case of towns paying fees for tuition in public high schools, but in no event less than one half the amount so expended, and shall reimburse towns so paying fees for tuition in other vocational schools, one half the amount so expended; provided, that in any event the commonwealth shall reimburse towns paying such tuition fees for children placed therein by the commissioner of public welfare or the trustees of the Massachusetts training schools for the whole amount so expended.

Section 7. Residents of towns in the commonwealth not maintaining approved independent industrial, agricultural or household arts schools offering the type of education desired, or children placed in such a town by the commissioner of public welfare or by the trustees of the Massachusetts training schools, may, in the sole discretion of the commissioner, be admitted to a school in another town. In making his decision, the commissioner shall take into consideration the opportunities for free vocational training where the applicant resides, the financial status of such place, the age, sex, preparation, aptitude and previous record of the applicant, and other relevant circumstances.

Section 7A. For the tuition in an approved vocational school of any town or county of any child over fourteen years of age placed in such town or county by the department of public welfare or by the trustees of the Massachusetts training schools or by the child welfare division of the institutions department of the city of Boston, the commonwealth or the city of Boston, as the case may be, shall pay to said school the tuition fee established by the commissioner.

Section 8. A town where a person resides who is admitted to the school of another town under the preceding section shall pay a tuition fee to be fixed by the commissioner, and in default of payment shall be liable therefor in contract to such other town.

Section 10. The commonwealth shall reimburse towns paying fees under section 8 for tuition in agricultural departments in high schools to the same extent as is provided by chapter 71 in the case of towns paying fees for tuition in public high schools, but in no event less than one half the amount so expended, and shall reimburse towns so paying fees for tuition in other vocational schools, one half the amount so expended; provided, that in any event the commonwealth shall reimburse towns paying such tuition fees for children placed therein by the commissioner of public welfare or the trustees of the Massachusetts training schools for the whole amount so expended.

References to law:

Section 7. Residents of towns in the commonwealth not maintaining approved independent industrial, agricultural or household arts schools offering the type of education desired, or children placed in such a town by the commissioner of public welfare or by the trustees of the Massachusetts training schools, may, in the sole discretion of the commissioner, be admitted to a school in another town. In making his decision, the commissioner shall take into consideration the opportunities for free vocational training where the applicant resides, the financial status of such place, the age, sex, preparation, aptitude and previous record of the applicant, and other relevant circumstances.

Section 7A. For the tuition in an approved vocational school of any town or county of any child over fourteen years of age placed in such town or county by the department of public welfare or by the trustees of the Massachusetts training schools or by the child welfare division of the institutions department of the city of Boston, the commonwealth or the city of Boston, as the case may be, shall pay to said school the tuition fee established by the commissioner.

Section 8. A town where a person resides who is admitted to the school of another town under the preceding section shall pay a tuition fee to be fixed by the commissioner, and in default of payment shall be liable therefor in contract to such other town.

Section 10. The commonwealth shall reimburse towns paying fees under section 8 for tuition in agricultural departments in high schools to the same extent as is provided by chapter 71 in the case of towns paying fees for tuition in public high schools, but in no event less than one half the amount so expended, and shall reimburse towns so paying fees for tuition in other vocational schools, one half the amount so expended; provided, that in any event the commonwealth shall reimburse towns paying such tuition fees for children placed therein by the commissioner of public welfare or the trustees of the Massachusetts training schools for the whole amount so expended.

A ruling of the Department based upon an opinion of the attorney-general, is that these tuition claims are charges against the municipality and not against the regular funds of the school committee, unless special provision has been made for this purpose and funds have been placed at the disposal of said committee.

Section 7. Residents of towns in the commonwealth not maintaining approved independent industrial, agricultural or household arts schools offering the type of education desired, or children placed in such a town by the commissioner of public welfare or by the trustees of the Massachusetts training schools, may, in the sole discretion of the commissioner, be admitted to a school in another town. In making his decision, the commissioner shall take into consideration the opportunities for free vocational training where the applicant resides, the financial status of such place, the age, sex, preparation, aptitude and previous record of the applicant, and other relevant circumstances.

Section 7A. For the tuition in an approved vocational school of any town or county of any child over fourteen years of age placed in such town or county by the department of public welfare or by the trustees of the Massachusetts training schools or by the child welfare division of the institutions department of the city of Boston, the commonwealth or the city of Boston, as the case may be, shall pay to said school the tuition fee established by the commissioner.

Section 8. A town where a person resides who is admitted to the school of another town under the preceding section shall pay a tuition fee to be fixed by the commissioner, and in default of payment shall be liable therefor in contract to such other town.

Section 10. The commonwealth shall reimburse towns paying fees under section 8 for tuition in agricultural departments in high schools to the same extent as is provided by chapter 71 in the case of towns paying fees for tuition in public high schools, but in no event less than one half the amount so expended, and shall reimburse towns so paying fees for tuition in other vocational schools, one half the amount so expended; provided, that in any event the commonwealth shall reimburse towns paying such tuition fees for children placed therein by the commissioner of public welfare or the trustees of the Massachusetts training schools for the whole amount so expended.

SECTION I.—To be filled out by Vocational School Authorities

Note instructions and information on reverse side of Sheet A before filling out.

I, M	Enrollment, dismissal and
Residing in .....(City) (Town)	removal dates:
.....(P. O. Address)	.....
Born in year.....month.....day.....	.....
wish to enter the.....	.....
.....(date) to take course of	.....
training in .....	.....
This application has the approval of Parent or	.....
Guardian: .....	.....
Residing at .....	.....
This application has been received and signed by	.....
..... (Director)	.....
(City) (Town) of.....Date of application.....	.....

SECTION II.—To be filled out by Supt. of Schools in pupil's home town

On.....	Notified	Date
M	(to be filled out by State office)	.....
presented this application. I (do) (do not)	.....	.....
approve admission. (If you disapprove,	.....	.....
state objections below.)	.....	.....
.....
Signed	Superintendent of Schools,	.....
(City) (Town) of.....	Date of Signature.....	.....
(Follow procedure below and note information on reverse side of Sheet A.)		

SECT. III.—To be executed by State

The State Department of Education, observing that the above application and its approval, has been properly filled out, hereby approves said application. The (Town) (City) of will be liable for the payment of tuition at the rate of from as provided for in sections 7, 7A, and 8 of chapter 74 of the General Laws, and will be reimbursed therefor as provided for in Section 10, provided the department is approved for reimbursement.

(See sections 7, 7A, 8 and 10, on reverse side of this blank.)

Sheets B and C, Section II, Procedure.—On receipt of Sheet A with signature of superintendent, the Director of the school shall fill in Section II of Sheets B and C, copying the data from Sheet A. Sheets A and B will be sent to the State Department of Education. Sheet B will be returned to the vocational school with the decision of the State Department, and Sheet A will be retained as a record in the State office. On receipt of notification of the State Department's decision, Sheet B can be filed as a permanent record, and Sheet C, having served its purpose as a temporary record of the case during the absence of Sheets A and B, may be destroyed. If Sheet A is not returned from the office of the superintendent of schools within ten days from date of application, the Director will send Sheets B and C to the State Department of Education for action, with statement why Sheet A is not returned.

SECTION I.—To be filled out by
Vocational School Authorities

Note instructions and information on reverse side of Sheet A before filling out.

I, M Enrollment, dismissal and
Residing in(City) (Town) removal dates:
.....(P. O. Address)
Born in year.....month.....day.....
wish to enter the.....
.....
on.....(date) to take course of
training in
This application has the approval of Parent or
Guardian:
Residing at
This application has been received and signed by (Director)
(City) (Town) of.....Date of application.....

SECTION II.—To be filled out by
Supt. of Schools in pupil's home town

On.....	Notified (to be filled out by State office)	Date
M .....	.....	.....
presented this application. I (do) (do not)	.....	.....
approve admission. (If you disapprove,	.....	.....
state objections below.)	.....	.....
.....
Signed .....	.....Superintendent of Schools.	.....
(City) (Town) of.....	.....Date of Signature.....	.....
(Follow procedure below and note information on reverse side of Sheet A.)		

SECT. III.—To be
executed by State

The State Department of Education, observing that the above application and its approval, has been properly filled out, hereby approves said application. The (Town) (City) of
will be liable for the payment of tuition at the rate of.....
from
as provided for in sections 7, 7A, and 8 of chapter 74 of the General Laws, and will be reimbursed therefor as provided for in Section 10, provided the department is approved for reimbursement.

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CITY OF MEDFORD
VOCATIONAL SCHOOL

REPORT OF PUPIL'S PROGRESS

NON-RESIDENT

CITY OF MEDFORD
VOCATIONAL SCHOOL

REPORT OF

FOR THE SCHOOL YEAR

September 19.....

THROUGH

June 19.....

TO THE SUPERINTENDENT OF SCHOOLS
OF

MEDFORD VOCATIONAL SCHOOL

School Year, Sept., 19..... June, 19.....

RECORD OF

NAME

DEPARTMENT

SUBJECTS		Sept. to Nov.	Sept. to Feb.	Sept. to April	Sept. to June
ACADEMIC	English				
	History				
	Citizenship and Economics				
	Hygiene				
RELATED	Mathematics				
	Science				
	Drawing				
	English				
Physical Training					
Shop Work					
Days Absent					
Times Tardy					
Times Dismissed					
Hours Short (Cumulative)					

SCALE OF MARKING

- A: Excellent
- B: Good
- C: Fair
- D: Failure (may be made up)
- E: Failure

Total Credits

MELVIN V. WELDON
Director

PLEASE READ CAREFULLY

Report Cards are issued during November, February, April, and at the end of the school year in June.

Credits are granted on the basis of hours of satisfactory work completed and are evaluated from marks daily received. 3,780 credits are required for graduation. One credit represents one hour of satisfactory work. The relation between credits and actual hours is fixed as follows:

A work: Total hours plus ten per cent. additional credit.

B work: Total hours plus five per cent. additional credit.

C work: Total hours.

D work: Sixty per cent. of total hours.

E failure: No credit.

Credits lost in any subject must be made up.

The system of marking is cumulative. The mark given at the end of each marking period indicates the pupil's standing from the beginning of the year to date. The final mark in June, therefore, indicates the pupil's accomplishment in each subject for the entire year.

CREDITS TO DATE

CLASS I..... II..... III.....

The Signature of the superintendent in the space below, signifies that he has carefully examined this report.

SUPERINTENDENT'S SIGNATURE

1

2

3

4

Non-Resident Report Card

EMPLOYER RECORD

MEDFORD VOCATIONAL SCHOOL

Name of Firm _____ Tel. No. _____

Address _____

Individual _____

Type of Work: _____

Number of Workers: _____

Union: _____

Remarks: _____

VISITS

Date

Remarks

9784-11-45-2,000

(over)

Employer Record, Placement Department-Front

EMPLOYER RECORD

MEDFORD VOCATIONAL SCHOOL

Name of Employer

Tel. No.

Address

Individual

Type of Work

Number of Workers

Employment

Remarks

Date

VISITS

Remarks

TRADE EMPLOYMENT RECORD MEDFORD VOCATIONAL SCHOOL

Name Dept.
 Address Class of 19
 Address Tel. No.
 Date of birth Graduate, Yes No
 Entered 19, Left 19, Time enrolled Years Mos.
 Father's name Mother's name
 Guardian's name Brother, Sister, Uncle, Aunt,
 Shop mark Related mark Academic mark
 General health Getting along with others Trade habits
 Height Co-operation Interest
 Weight Initiative Attendance
 Appearance Application Rating
 Remarks Social Security No.

Employment Record, Placement Department- Front

Photocopy of record, Government of India, 1901

<p>1901</p>	<p>1902</p>	<p>1903</p>	<p>1904</p>
<p>1905</p>	<p>1906</p>	<p>1907</p>	<p>1908</p>
<p>1909</p>	<p>1910</p>	<p>1911</p>	<p>1912</p>
<p>1913</p>	<p>1914</p>	<p>1915</p>	<p>1916</p>
<p>1917</p>	<p>1918</p>	<p>1919</p>	<p>1920</p>

Date..... Hourly wage..... Total wage.....

Employer.....

Kind of work.....

Date left.....

Reason for leaving.....

Date..... Hourly wage..... Total wage.....

Employer.....

Kind of work.....

Date left.....

Reason for leaving.....

Date..... Hourly wage..... Total wage.....

Employer.....

Kind of work.....

Date left.....

Reason for leaving.....

Date..... Hourly wage..... Total wage.....

Employer.....

Kind of work.....

Date left.....

Reason for leaving.....

Date..... Hourly wage..... Total wage.....

Employer.....

Kind of work.....

Date left.....

Reason for leaving.....

Employment Record, Placement Department - Back

U.S. GOVERNMENT PRINTING OFFICE

SUPPLEMENTARY INFORMATION

Use This Side Only For Information Concerning Ex
Or For Placement Service Rendered To Individuals Who

Name of Individual	Permanent		Temporary		Probable Duration of Position	Age in Years	Where Trained		
	In Trade or Occupation	Allied to Trade or Occupation	In Trade or Occupation	Allied to Trade or Occupation			School	and	Department

MEDFORD VOCATIONAL SCHOOL FOLLOW UP REPORT

Name Date

Department Class of 19

Employed by

Progress Hourly Rate

Trade Skill Interest

Co-operation Application

Remarks

Working Cert. Yes.....No.....

Follow Up Report On The Graduates Used By The
Placement Department

Follow Up Report On The Graduates Used By The
Placement Department

Use This Side Only For Information Concerning En
Or For Placement Service Rendered To Individuals Who

NAME OF INDIVIDUAL	Permanent			Temporary			Probable Duration of Position	Age in Years	Where Trained --- School and Department
	In Trade or Occupation	Allied to Trade or Occupation	Outside of Trade or Occupation	In Trade or Occupation	Allied to Trade or Occupation	Outside of Trade or Occupation			
20	21	22	23	24	25	26	27	28	29
1									
2									
3									
4									
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17									
18									
19									
20									
21									
22									

Report Form Used By The State Supervisors

Report Form Used By The State Supervisors

Notification of Resignation, Dismissal of Non-Resident

STATE-AIDED VOCATIONAL SCHOOL
(To be filed monthly; do not include re-entrances)

----- School

(City or Town)

NAME	Department or Course	Address

Report Re-entrances and New Entrances on reverse side of blank.
Return blank whether you have any information to submit or not.
BLANK M.

IM 2-44

FOUR-WEEKLY REPORT

Four weeks ending _____		for _____		School _____		Dept. _____	
Report each Department (House Room) Separately.				Total number hours spent by members on supervised project work _____			
Whole Number Pupils _____		School was in session _____ days of _____ hours.					
Sessions Omitted _____		Substitute teacher was present _____ days.					
Visits by State Supervisors: Write in the names and give dates.							
NAMES		DATES	TIME SPENT	NAMES		DATES	TIME SPENT
Names of Pupils Added				Names of Pupils Lost			
		Resident	Non Resident			Resident	Non Resident

10m(d)-12-45-17483

State Attendance Record-Four Week Periods- Front.

Membership at close of last period	DATE	Number of Members		Number Present		Number of Absences		Number of Tardi nesses		Number of Dismissals		Members Lost		Members Added	
		A. M.	P. M.	A. M.	P. M.	A. M.	P. M.	A. M.	P. M.	A. M.	P. M.	B.	G.	B.	G.
Monday															
Tuesday															
Wednesday															
Thursday															
Friday															
Saturday															
Monday															
Tuesday															
Wednesday															
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Wednesday															
Thursday															
Friday															
Saturday															
Monday															
Tuesday															
Wednesday															
Thursday															
Friday															
Saturday															
Per Cent Attendance		Aggregate		Aggregate		Total		Total		Total		Total		Total	
		Average		Average											

State Attendance Report. Four Week Period-Back.

LIFE HIST

SCHOOL: *Medford Vocational*

1. Name of pupil	2. Last address while in the school
Date of birth	

PREVIOUS SCHOOL RECORD

3. Last school attended	4. Years attended	
5. Date of leaving	6. Grade left	7. Age at leaving
8. Reason for leaving	9. Rating	

SUBSEQUENT EMP

17. Year	18. Date	19. Age	20. Address	21. Name of Employer	Address
1st.					
2nd.					
3rd.					
4th.					
5th.					

MEDFORD VOCATIONAL SCHOOL

Name _____ Entered from _____ Date _____ Graduated _____

Quarter	English	History	Citizenship and Economics	Hygiene	Mathematics	Science	Drawing	Related English	Physical Training	Shop	Conduct	Absent	Tardy	Dismissed	Hours Short	Hours Earned	
I																	
194																	
II																	
194																	
III																	
194																	
IV																	
194																	

SCHOOL: Medford Vocational

LIFE HISTORY CARD

DEPARTMENT

1. Name of pupil		
2. <i>Last address while in the school</i>	Street and number	City or town
	Street and number	City or town
	Street and number	City or town
Date of birth		

PREVIOUS SCHOOL RECORD

3. Last school attended	4. Years attended
5. Date of leaving	6. Grade left
7. Age at leaving	8. Reason for leaving
9. Rating	

VOCATIONAL SCHOOL RECORD

10. Date admitted	11. Age	12. Training desired
13. Date of leaving	14. Age	15. Reason
16. Record	{ a. Attendance (length)	b. Effort
	{ c. Progress	

SUBSEQUENT EMPLOYMENT RECORD

[illegible]

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BOSTON UNIVERSITY



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